

For Reference

NOT TO BE TAKEN FROM THIS ROOM

For Reference

NOT TO BE TAKEN FROM THIS ROOM

Ex LIBRIS
UNIVERSITATIS
ALBERTAENSIS





Digitized by the Internet Archive
in 2019 with funding from
University of Alberta Libraries

<https://archive.org/details/House1966>

100
10D

THE UNIVERSITY OF ALBERTA

AN ANALYSIS OF INTERPERSONAL INFLUENCE RELATIONS WITHIN
A SCHOOL ORGANIZATION

by

JOHN HAMILTON HOUSE

A THESIS

SUBMITTED TO THE FACULTY OF GRADUATE STUDIES
IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE DEGREE
OF DOCTOR OF PHILOSOPHY

DEPARTMENT OF EDUCATIONAL ADMINISTRATION

EDMONTON, ALBERTA

OCTOBER, 1966

UNIVERSITY OF ALBERTA
FACULTY OF GRADUATE STUDIES

The undersigned certify that they have read, and recommend to the Faculty of Graduate Studies for acceptance, a thesis entitled "An Analysis of Interpersonal Influence Relations Within a School Organization" submitted by John Hamilton House in partial fulfilment of the requirements for the degree of Doctor of Philosophy.

ACKNOWLEDGEMENTS

The writer wishes to acknowledge the encouragement, advice, and assistance he has received from the members of his thesis committee during the course of this study. Especially, the writer wishes to thank Dr. J. E. Seger, who acted as his advisor and as the chairman of the thesis committee.

ABSTRACT

The purpose of this study was to gain an understanding of the influence structures of a Canadian Public Secondary School as an example of a complex organization. A specific concept of influence and some concepts from organization theory were used in the investigation of the interpersonal influence relationships that existed among members of the organization and by means of which the purposes and processes of the organization were related. The problem was stated more specifically in terms of four sub-problems relating to the nature of the influence structures on twelve designated task topics, the relationship of the informal primary groups to the influence structures, the nature of the modal influence relationships, and the nature of the relationships between teachers and administrators within the organization.

Data relating to the nature of the influence structures were gathered by means of a sociometric questionnaire designed to gather data on three dimensions of influence: communications, reliance and attributed influence. Second and third order communication and reliance relationships were traced by means of simple matrix manipulation. Weights were calculated according to which members were ranked on each dimension of each task topic. This methodology was developed by Blocker et al. at the University of Texas.

Data relating to the other three sub-problems were gathered by means of the sociometric questionnaire, as well as by means of a

personal interview with each member of the organization.

This study was partially based on Schermerhorn's concepts of influence, power, and authority. Influence relationships between all pairs of members in the organization were categorized according to Schermerhorn's Typology of Influence and Power in the Pair Relationship.

The methodology developed by Blocker et al. was found to be a useful research technique for the analysis of the influence structures of a set of specified task processes found in the organization. Each dimension could be analysed separately, making available for study a communication structure, a reliance structure and an attributed influence structure.

One integrated primary social group was found in this organization, the structure of which was found to be congruent in some aspects, and incongruent in other aspects to the influence structures found.

The concepts underlying Schermerhorn's typology of influence relationships are considered to be sound, and useful in the ordering of data in empirical research. Schermerhorn's typology was revised by the addition of four categories, and it would appear that it may be revised to be suitable for the study of any organization.

The Principal of the school was found to be the most influential member of the organization. He appeared to gain and maintain this influence position by the skillful use of the influence resources at

his disposal, and by the use of a mixture of normative and coercive sanctions. The teachers of the school reported they were highly dependent upon the Principal, but were generally satisfied with the practices of the organization, the direction of influence by the influence elites, and with their own perceived degrees of influence. However, teachers did desire to have more influence in processes relating directly to instruction.

As a result of this investigation it is suggested that studies of public school organizations focused on the availability and use of influence resources by members in the organization would provide empirical data useful in the development of organization theory, and specifically useful to students of educational administration and to educational administrators.

TABLE OF CONTENTS

CHAPTER	PAGE
I. THE PROBLEM	1
Introduction.	1
Statement of the Problem.	2
The significance of the problem	3
Limitations of the study.	5
Delimitations of the study.	5
Assumptions underlying the study.	6
Definition of Terms	6
Attributed influence.	6
Authority	6
Cohesion.	6
Communication	7
Communication net	7
Dependency.	7
Formal structure.	7
Influence	7
Influence elites.	8
Influence relationship.	8
Influence resources	8
Influence structure	8
Informal structure.	8
Involvement	8

CHAPTER	PAGE
Modal relationships	9
Power	9
Reliance.	9
Sanctions	9
Bibliography for Chapter I	10
II. THEORETICAL FRAMEWORK	11
General Systems Model	11
The Public Secondary School as a System	14
Concepts of Influence, Power and Authority.	14
Typologies of Influence Relationships	18
Schermerhorn's Typology of Influence Relationships.	20
Symmetrical pair relationships.	20
Asymmetrical pair relationships	22
Typologies of Organizations	25
A Typology of Organizations Based Upon Compliance Relationships	27
Involvement and Influence Relationships	34
Sub-Problems and Hypotheses	35
Analysis of Sub-Problem 1.0	36
Hypothesis 1.1	40
Hypothesis 1.2	40
Hypothesis 1.3	41
Hypothesis 1.4	41
Hypothesis 1.5	41

CHAPTER	PAGE
Hypothesis 1.6	41
Hypothesis 1.7	42
Analysis of Sub-Problem 2.0	42
Hypothesis 2.1	44
Analysis of Sub-Problem 3.0	44
Hypothesis 3.1	44
Hypothesis 3.2	45
Analysis of Sub-Problem 4.0	45
Hypothesis 4.1	45
Hypothesis 4.2	46
Hypothesis 4.3	47
Hypothesis 4.4	47
Summary of Sub-Problems and Hypotheses.	48
Bibliography for Chapter II	51
III. DESIGN AND PROCEDURES	55
Design for Sub-Problem 1.0	55
Influence dimensions of the system.	55
The communication dimension	56
The reliance dimension.	58
The attributed influence dimension.	59
Method of Obtaining the Data.	59
Design for Sub-Problem 2.0.	62
Design for Sub-Problem 3.0.	62
Design for Sub-Problem 4.0.	63

CHAPTER	PAGE
Collection of the Data.	63
Administration of the questionnaire	64
Administration of the interview schedule.	65
Bibliography for Chapter III.	66
IV. DEFINITION AND DESCRIPTION OF THE SYSTEM.	68
Descriptive Characteristics of the School District. .	68
Descriptive Characteristics of the School	68
Definition of the System Under Study.	69
Personnel Characteristics	71
Description of the Formal Positions in the System . .	72
The District Superintendent and the Assistant	
Superintendent.	72
The Director of Secondary Instruction	74
The Principal	75
The Vice-Principal.	76
The Chief Industrial Arts Teacher	76
French and Science Supervisors.	77
Chief Librarian	77
Special Counsellor.	77
Department Heads	78
Teachers.	80
Organization of the School.	81
Description of the Formal Means of Decision-Making. .	84
Task Topic 1, Scheduling.	86

CHAPTER	PAGE
Task Topic 2, Instructional Facilities.	86
Task Topic 3, Teaching Assignments.	87
Task Topic 4, Course Content.	88
Task Topic 5, Teaching Methodology.	88
Task Topic 6, Classroom Organization.	88
Task Topic 7, Student Evaluation.	88
Task Topic 8, Grading and Promotion	88
Task Topic 9, Student Discipline.	88
Task Topic 10, Student Accounting	89
Task Topic 11, Extra-Curricular Activities.	89
Task Topic 12, Parent Relationships	89
Bibliography for Chapter IV	90
V. ANALYSIS OF THE DATA: SUB-PROBLEM 1.0	91
Communications Dimension.	91
The Reliance Dimension.	93
The Attributed Influence Dimension.	95
The Quantification of Relative Amounts of Influence .	96
Communication, Reliance, and Attributed Influence	
on Each Task Topic.	96
Task Topic 1, Scheduling.	96
Task Topic 2, Instructional Facilities.	98
Task Topic 3, Teaching Assignments.	99
Task Topic 4, Course Content.	100
Task Topic 5, Teaching Methodology.	103

CHAPTER

PAGE

Task Topic 6, Classroom Organization.	104
Task Topic 7, Student Evaluation.	105
Task Topic 8, Grading and Promotion	107
Task Topic 9, Student Discipline.	108
Task Topic 10, Student Accounting	109
Task Topic 11, Extra-Curricular Activities.	111
Task Topic 12, Parent Relationships	112
Summary of Communication, Reliance and Attributed Influence on Each Task Topic.	113
Relationships Among the Communications, Reliance and Attributed Influence Dimensions	125
Sub-Problem 1.0 - Hypotheses.	129
Hypothesis 1.1	129
Hypothesis 1.2	129
Hypothesis 1.3	134
Hypothesis 1.4	137
Hypothesis 1.5	138
Hypothesis 1.6	143
Hypothesis 1.7	145
Summary of Hypotheses under Sub-Problem 1.0	149
Bibliography for Chapter V.	152
VI. ANALYSIS OF THE DATA: SUB-PROBLEM 2.0	153
Restrictions on the Formation of Social Relationships	153
Isolates	155

CHAPTER

PAGE

	Social Groups	157
	Centres of Social Interaction	158
	Hypothesis 2.1	162
	Summary	164
	Bibliography for Chapter VI.	166
VII.	ANALYSIS OF THE DATA: SUB-PROBLEM 3.0	167
	Conflict Relationships.	167
	The Categorization of Influence Relationships	175
	Categories Added to Form the Revised Schema	175
	Method of Categorizing Relationships.	182
	Category 1, Mutual Friendship	182
	Category 2, Mutual Regard Based on Expertise.	182
	Category 3, Mutual Popularity	182
	Category 4, Popularity.	183
	Category 5, Modeling After the Person	183
	Category 6, Following the Person's Example or Command	183
	Category 7, Casual Coworkers.	183
	Category 8, Casual Relations.	184
	Category 9, Ambivalent or Uncertain Pair Relationships	184
	Category 10, Submission to Leader or Dominant Figure Who Embodies Informal Group Norms.	184
	Category 11, Submission to a Dominant Figure	

CHAPTER

PAGE

as a Rational Expert.	184
Category 12, Submission to a Dominant Person as	
an Institutional Figure	184
Category 13, Casual Relations	185
Category 14, Avoidance—Strain.	185
Category 15, Evenly Matched Conflict.	185
Category 16, Enevenly Matched Conflict.	185
Significant Relationships	186
Relationships Within Departments.	193
English Department.	193
Social Studies Department	195
Mathematics Department.	196
Science Department.	197
French Department.	198
Commerce Department	199
Physical Education Department	199
Relationships Within the Library Centred	
Teaching Innovation Group	201
: Summary of Influence Relationships.	203
Hypothesis 3.1.	205
Hypothesis 3.2	207
Summary	209
Bibliography for Chapter VII	211
VIII. ANALYSIS OF THE DATA: SUB-PROBLEM 4.0	212

CHAPTER	PAGE
Hypothesis 4.1	212
Hypothesis 4.2	218
Hypothesis 4.3	222
Hypothesis 4.4	224
Summary of Hypotheses under Sub-Problem 4.0	233
Bibliography for Chapter VIII	236
IX. SUMMARY AND CONCLUSIONS	237
Purpose of the Study.	237
Sub-Problem 1.0	238
Sub-Problem 2.0	240
Sub-Problem 3.0	242
Sub-Problem 4.0	244
Implications for Further Research	249
Bibliography for Chapter IX	253
BIBLIOGRAPHY	254
APPENDICES	261
A. Interpersonal Relationships Questionnaire	262
B. Interview Schedule.	289
C. Communication, Reliance and Attributed Influence Ranks by Department on Task Topics 1 to 8	299
D. Influence in the Pair Relationship For All Members of the System Categorized According to Figure V	304

LIST OF TABLES

TABLE		PAGE
I	A Typology of Compliance Relations.	29
II	A Typology of Goals and Compliance.	31
III	Personnel Characteristics	70
IV	Communications, Reliance and Attributed Influence	
	Weights and Ranks for Task Topics 1, 2 and 3	97
V	Communications, Reliance and Attributed Influence	
	Weights and Ranks for Task Topics 4, 5 and 6	101
VI	Communications, Reliance and Attributed Influence	
	Weights and Ranks for Task Topics 7, 8 and 9	106
VII	Communications, Reliance and Attributed Influence	
	Weights and Ranks for Task Topics 10, 11 and 12.	110
VIII	Administrators Perceived Degree of Influence—Self	
	Report	115
IX	Spearman Rank Correlation Coefficients Between	
	Dimensions on Each Task Topic	127
X	Coefficients of Concordance of Dimensions Among	
	12 Task Topics	129
XI	Members Classified as Influentials on Task Topics	
	1 to 12	135
XII	Overall Differences Among Numbers of Influential Teachers	
	on 12 Task Topics.	136
XIII	Teachers' Perceived Degree of Influence on 12 Task	
	Topics	139

TABLE

PAGE

XIV	Teachers' Desired Degree of Influence on 12 Task Topics.	141
XV	Differences Between Means of Teachers' Perceived Degree of Influence and Teachers' Desired Degree of Influence.	142
XVI	Teachers' Perceptions of Their Use of Professional Competence on 12 Task Topics	144
XVII	Relationship Between Teachers' Perceived Use of Professional Competence and Communication Links Between Teachers and Coordinators and Administrators	146
XVIII	Point Biserial Correlation Coefficients Showing Relationship Between Influentials and Age, Years of Experience, Years of Training, and Years of Experience in This School.	148
XIX	Members Satisfaction with Organizational Practices Relating to Twelve Task Topics	163
XX	Influence Relationships Within the English Department. .	194
XXI	Influence Relationships Within the Social Studies Department	196
XXII	Influence Relationships Within the Mathematics Department	197
XXIII	Influence Relationships Within the Science Department. .	198
XXIV	Influence Relationships Within the French Department.. .	199
XXV	Influence Relationships Within the Commerce Department .	200
XXVI	Influence Relationships Within the Physical Education Department	200

TABLE		PAGE
XXVII	Influence Relationships Between Members Active in the Library Centred Teaching Innovation	202
XXVIII	Summary of Influence Relationships for Each Member in the System Categorized According to Figure VI. .	204
XXIX	Summary of All Influence Relationships in the System .	205
XXX	Summary of Influence Relationships Between Teachers. .	208
XXXI	Teachers Perceptions of Administrators Sensitivity to Normative Sanctions	221
XXXII	Influence Relationships Between Administrators and Teachers.	223
XXXIII	Closeness of Supervision Reported by Teachers.	227
XXXIV	Teachers' Perceptions of their Dependency on Five Administrators.	228
XXXV	Relationships Between Influence Relationships and Degree of Dependency.	231

LIST OF FIGURES

FIGURE		PAGE
I	Influence and Power in the Pair Relationship	21
II	The Relation Between Involvement and Influence Relationships	35
III	Reciprocated Social and Friendship Relationships . . .	154
IV	Conflict Relationships	168
V	Influence and Power in the Pair Relationship (Revised).	176

CHAPTER I

THE PROBLEM

I. INTRODUCTION

An organization is above all purposeful. It exists for the achievement of some goal--the creation of a product or the rendering of a service--and the major criteria by which it is judged are its success and efficiency in goal achievement (3, p. 4).

If the fitting together of component parts in a carefully planned pattern of related activities is to function in the service of goal achievement, one of the inherent needs of any organization is influence over the performances of its members. Thus influence over member behaviour is one of the defining characteristics of formal organization, "perhaps its most essential characteristic" (3, p. 5). To this end, formal structures of organizations are rationally conceived and ordered for the maintenance and justification of influence, which is made manifest in interpersonal relationships between members occupying designated positions.

It would seem that organizations are successful to a degree, so that within organizations members behave differently than they do outside of the organization. Allport showed this clearly in comparing the normal curve of individual attributes and acts to the conformity curve which is characteristic of organizationally determined behaviour (1). Research has shown that the rationally conceived influence patterns are modified by personality and attitudinal differences

existing among members in interaction, and by social bonds which form between members in interaction.

If we are to understand how an organization functions, we must not only understand the purposes, structure and processes of the organization, but we must gain an understanding of the nature of the interpersonal influence relationships existing within the organization.

II. STATEMENT OF THE PROBLEM

The purpose of this study was to gain an understanding of the functions of a complex organization by using a specific concept of influence and some concepts of organization theory in the investigation of the nature of certain interpersonal influence relationships existing among members of the organization by means of which the purposes and processes of the organization were related. The organization studied was a Canadian Public Secondary School. The interpersonal influence relationships studied were those dyadic modal relationships which seemed to be most closely related to the goals of the organization, and the tasks most common to all members of the organization. The members studied were all teachers, supervisors and administrators intimately concerned with the instructional tasks of the school.

More specifically the problem was stated in terms of four sub-problems:

1. What is the nature of the influence structures existing within the organization?

2. What is the relationship of the informal primary groups in the organization to the influence structures existing within the organization?
3. What is the nature of the dyadic modal influence relationships existing within the organization?
4. What is the nature of the relationships between teachers and administrators within the organization?

The Significance of the Problem

This problem has significance to the development and application of power theory and organizational theory, and has direct significance to the practices of educational administrators.

Power is not a simple concept, nor are the related concepts of influence and authority. Power theory has not been well developed by social scientists, perhaps because of the very divergence of views among social scientists on the concepts of influence, power and authority. One purpose of this study was to test the usefulness of Schermerhorn's conceptual development of influence relationships in empirical analysis. To the best of this researcher's knowledge such a test has not been carried out. Thus the results of this study should provide knowledge concerning the usefulness of Schermerhorn's concepts of influence, power and authority.

During the past twenty-five years, much development of the concepts of organizations has taken place. Although much of this development has been based upon what appears to be practical reality,

many of the concepts, many of the assumptions, and many of the logically derivable hypotheses have not been tested empirically. One of the purposes of this study was to test empirically some of the concepts, assumptions and hypotheses of organization theory, particularly those developed by Etzioni based upon the nature of organizational compliance structures (2). To the best of this researcher's knowledge, the selected hypotheses have not been empirically verified. Thus the results of this study should provide some insights related to organization theory.

Secondary schools in North America are complex organizations, with clearly defined formal hierarchical structures, in which personnel, with a claimed degree of professionalism, function in specialized and differentiated tasks. The problem of the educational administrator has been to determine how the activities of the specialized personnel may be coordinated to fulfill the purposes of the organization most effectively. To fulfill his function, the educational administrator must be aware of the influences which may affect the performance of the members of the organization, and he must maintain his own influence over member behaviour. One of the purposes of this study was to determine how influence, on specific task topics, was distributed through the organization, and thus how influence may be distributed through other secondary school organizations. The results of this study should provide insights into

the diffusion of influence in public secondary school organizations.

Limitations of the Study

As the data concerned personal relationships, the investigation was limited to the degree of cooperation which could be elicited from the respondents in providing answers to the data gathering questionnaire, and to the degree of empathy which the researcher could establish with the respondents in personal interviews.

Much of the data required in this study pertained to the perceptions of the respondents. Thus this study was limited to the degree that the respondents' perceptions could be elicited, to the accuracy with which these perceptions could be interpreted, and to the accuracy with which these perceptions could be systematically quantified. The technique of interviewing each respondent to amplify, clarify and verify the data gathered by means of a questionnaire, was designed to reduce these limitations as much as possible.

Delimitations of the Study

This study was confined to the study of influence relationships on twelve task topics, selected as being those most closely related to the goals of the organization and to the tasks most common to all members of the organization. It was further confined to one public secondary school in one social milieu in one brief period of time.

Assumptions Underlying the Study

The following assumptions were made as basic to this study:

1. It was possible to isolate for study one school organization which was set within and in interaction with its suprasystem.
2. It was possible to solicit from members sufficient and accurate data on interpersonal relationships.
3. Indices of influence developed from different bases could not be meaningfully combined.

III. DEFINITION OF TERMS

Attributed Influence

The influence which is attributed to a member of the organization by another member of the organization.

Authority

Socially sanctioned power.

Obedience to authority is accompanied by the credence of principle, since authority embodies norms or values of a group, or of society at large (4, p. 6).

Cohesion

The term cohesion refers to a positive expressive relationship among two or more actors.

It is assumed that a positive cohesive relationship is one in which the actors have positive emotional investment in each other and that these investments are not "wild" but are governed by norms (2, p. 176).

Communication

The term communication refers to the transference of thought or feeling from one member to another through gesture, posture, facial expression or tone and quality of voice, as well as by speech in a face to face situation.

Communication Net

The relatively stable pattern of communication which develops between members is called a communication net.

Dependency

The degree to which a member's future status in the organization was perceived as depending upon the will of a particular superordinate was referred to as dependency.

Formal Structure

The term formal structure refers to the scheme of hierarchical status positions, the duties, responsibilities, rights and priveleges of persons occupying these positions, and the means of routing communication from position to position, established to control the functional processes of the organization.

Influence

The term influence is defined as the ability of one person to orginate action for another person.

Influence Elites

Those members of a group, or of an organization who are seen to be the most influential members of the group or organization are termed to be the influence elites.

Influence Relationship

The relatively stable relationship between two persons in terms of influence is referred to as an influence relationship.

Influence Resources

An influence resource is a means by which one person can influence the behaviour of another person. An influence resource may be a personal characteristic, or the ability to impose sanctions.

Influence Structure

A relatively stable pattern of influence relationships existing between members of an organization is referred to as an influence structure.

Informal Structure

The use of this term is restricted to refer to the relatively stable pattern of social relationships existing between members of the organization, formed through voluntary association to meet the individual social needs of the members concerned.

Involvement

The term involvement refers to the orientation of subordinate

members of the organization.

The orientation of the subordinated actor can be positive (commitment) or negative (alienation). This is determined in part by the degree to which the power applied is considered legitimate, and in part by its congruence with the line of action he would desire. This orientation is referred to as involvement (2, p. 2).

Modal Relationships

The term modal relationships refers to the relatively stable relationships which have developed between members of the system.

Power

Power is a form of influence but is not identical with it.

Power is defined as

...the processual relation between two parties modally characterized by (1) asymmetrical influence, in which a perceptible probability of decision rests in one of the two parties, even over the resistance of the other party: and (2) the predominance of negative sanctions (threatened or actual) as a feature of behaviour in the dominant party (4, p. 12).

The exception to (2) is the case of charisma, where the follower is lured and the predominant sanctions may be positive.

Reliance

The term refers to the willingness of one member to rely on another member or members of the organization.

Sanctions

This term is used in the sociological sense to refer to both rewards and penalties as reinforcements of desired behaviour.

BIBLIOGRAPHY FOR CHAPTER I

- (1) Allport, F. H., "The J-Curve Hypothesis of Conforming Behaviour," Journal of Social Psychology, 5, 1934, pp. 141-183.
- (2) Etzioni, A., A Comparative Analysis of Complex Organizations, (Glencoe, Illinois, The Free Press, 1961).
- (3) Kahn, R. L., D. M. Wolfe, R. P. Quinn, J. D. Snoek, Organizational Stress: Studies in Role Conflict and Ambiguity, (New York, John Wiley and Sons, Inc., 1964).
- (4) Schermerhorn, R. A., Society and Power, (New York, Random House, 1961).

CHAPTER II

THEORETICAL FRAMEWORK

General Systems Model

A fruitful starting point for a discussion of interpersonal influence structures in an organization is to view the organization as a social system, having the properties of the general systems model as discussed by Hearn (29). In developing the concept of the systems model, Hearn states,

...it is possible to represent all forms of animate and inanimate matter as systems; that all forms from atomic particles through atoms, molecules, crystals, viruses, cells, organs, individuals, groups, societies, planets, solar systems, even the galaxies; may be regarded as systems (29, p. 38).

He states further that,

Each system consists of objects which are simply the parts or components of the system, there are attributes which are the properties of the objects; and there are the relationships among the objects and their attributes which tie the system together (29, p. 39).

Allport has offered a more comprehensive definition:

...any recognizable delimited aggregate of dynamic elements that are in some way interconnected and interdependent and that contrive to operate together according to certain laws and in such a way as to produce some characteristic total effect. A system, in other words, is something that is concerned with some kind of activity, and preserves a kind of integration and unity; and a particular system can be recognized as distinct from other systems to which, however, it may be dynamically related. Systems may be complex; they may be made up of interdependent subsystems, each of which, though less autonomous than the entire aggregate, is nevertheless fairly distinguishable in operation (1, p. 496).

All systems then except the smallest have subsystems, and all

systems except the largest have suprasystems.

Systems may be open or closed. A closed system does not make exchanges with its suprasystem and is characterized by an increase in entropy. The concept of entropy has been discussed by Hearn as,

...a certain quantity called entropy, or degree of de-organization, never decreases but tends to increase to a maximum until the process in which it is operating reaches a state of equilibrium. A ghost town rotting to the ground, the human body returning to dust after death, a tea kettle cooling on the stove until it reaches room temperature—these are all examples of this fact of nature (29, p. 34).

An open system makes exchanges with its suprasystem, and is characterized by a tendency toward a steady state (29, p. 36 ff.).

While open systems have the properties of systems in general, they also have certain characteristics which distinguish them from closed systems (29, p. 38 ff.). Among these characteristics of open systems, Griffiths notes the following (27, p. 429):

1. Open systems exchange matter, energy, and information with their supra-systems. They have inputs and outputs.
2. Open systems tend to maintain themselves in steady states. A steady state occurs when a constant ratio is maintained among the components of the system, given a continuous input to the system.
3. Open systems maintain their steady states, in part, through the dynamic interplay of sub-systems operating as functional processes. Thus the various parts of the system function without persistent conflicts that can be neither resolved nor regulated.
4. Open systems maintain their steady states through feedback processes. Feedback refers to that portion of the output of a system which is fed back to the inputs and affects succeeding outputs, and to the property of being able to adjust conduct by reference to past performance.

5. Open systems display progressive segregation (51). This process occurs when the system divides into an hierarchical order of subordinate parts, which gain a certain independence from each other.

The functional processes of an open system may be examined by an analysis of the interaction of the parts of the system. If an organization is viewed as a system, and if the individuals functioning within the organization are viewed as the parts of the system, then the functional processes of the organization may be examined by an analysis of the interactions of the individuals within the organization. According to Hearn,

...every individual is in an interdependent relationship with other individuals, ...he is a part of a number of interlocking networks of interaction (groups); and that certain dimensions of his behaviour can be understood only in terms of the structure and function of these networks, and of the individual's position and role in them (29, p. 36).

In open systems in which individuals functioning within the organization are viewed as parts of the system, the homeostatic steady state results, in Schermerhorn's view, from the interpersonal influence relationships existing within the system,

...by assuming that change is the starting point and that order or equilibrium is a by-product of the ceaseless quest for power by individuals, groups.... If we assume as primary an inherent instability in human affairs, we shift the emphasis to the irregular, dynamic, and asymmetrical aspects of the social powers, and abandon the preoccupation with equilibrium which seems to impose more order on social interaction than we actually find there (46, p. 14).

This view seems to be supported by Barnard (5, Chap. 7) and Haire (28). Acceptance of this concept of equilibrium has at least two immediate results. The first is that interpersonal influence

relationships are seen to be the key variable in explaining the functional processes of any system. The second is that there must be a clear understanding of the concepts of influence, power, and authority, and of the relationship between these concepts.

The Public Secondary School as a System

The open system under consideration was a public secondary school. The suprasystem was the school district organization within which the secondary school functioned. Within the school system was found subsystems, or interlocking networks of interaction which Hearn called groups (29, p. 36), such as informal social groups and personnel functioning in such groups as subject departments. For purposes of analysis, the system isolated for study included all professional personnel who functioned within the secondary school, and included all administrative and supervisory personnel of the school district system who did not function wholly within the isolated system, but who interacted directly with the personnel who did function wholly within the system. The members of this system were the objects. It was assumed they would interact and that these interactions would create connecting paths and bonds which would be the relationships. All physical factors were parts of the environment of the system, and were relevant in interpreting the functional processes of the system.

Concepts of Influence, Power and Authority

The exacting task of defining the related concepts of influence,

power and authority, of comparing one with the other, and of distinguishing one from the other has a long and honourable history in the literature of the social sciences. No attempt at a lengthy review or detailed analysis of this literature will be undertaken here. Rather, the approaches will be illustrated with several definitions, culminating in one suggested approach which seemed to be the most useful for this empirical study.

A number of theoretirical contributions have been related primarily to the study of authority relationships. Among the most important of these seem to be Weber's classification of the types of authority according to the kind of claim to legitimacy typically made by each (52, Part III), Barnard's formulation of the implications of subjective authority (5, Chap. 12), and the subsequent developments of these treatments of organizational authority by a number of American social scientists, most notably, Simon (48) and Blau (12).

Two examples will illustrate the difficulties experienced in using the term authority. In his book, *Political Power* (38), Charles Merriman uses the terms power and authority interchangeably, either as equivalent terms, or as synonyms for one another. In Robert V. Presthus' article setting forth a general theory of organizational behaviour (44), authority is defined as "the ability to elicit compliance whether or not the employee believes an order ought to be obeyed" (44, p. 56). The confusion begins when Presthus writes of "authority, like power being reciprocal..." of "...defiance to the authority of...power..." of "the permissive level of influence..."

distinguished from "...the authoritative level of power..." and of "the informal loci of power...." Certainly Presthus' article would have benefited from more clearcut analytical distinctions between authority, power, and influence.

There are many approaches which view authority as a special case of power or influence. Authority has been defined as "the power to make decisions which guide the actions of another," (48, p. 125) "formal power," (34, p. 133) "institutionalized power," (10, p. 736) "legitimate influence" (4, p. 236) and "legitimate power" (21, p. 321). Barber has arbitrarily defined authority as "legitimate influence" and power as "illegitimate influence" (4, p. 236). C. Wright Mills has defined authority as, "authority is power that is explicit and more or less voluntarily obeyed; manipulation is the secret exercise of power unknown to those who are influenced" (39, p. 316). It would seem to be of limited value to define these terms in such a circular way without rigorous and precise formulations of power and influence. The meaning of the term power seems to be particularly elusive. In this regard Brecht has said,

...the term always designates the ability to get one's will done, but it fails to express by what means, and to what purposes this ability is desired and used (15, p. 346).

Elsewhere, Brecht has distinguished between two types of power: (1) the constitutional or legal right to give or enforce orders, as when the Constitution says "the congress shall have power to levy and collect taxes," and (2) "the actual power to get things done or to prevent their being done" (16, p. 1). This distinction between legal

power and actual power is also made by Newstadt in his study of Presidential Power (41). However, Newstadt would equate the first type, formal constitutional power with authority, and he would use the term influence as a synonym for the second type of power "...effective influence upon the conduct of others" (41, p. 198). French and Raven state that "influence is kinetic power, just as power is potential influence" (25, p. 52). This formulation has been used by Kahn et al in empirical studies in role conflict and ambiguity (33).

Schermerhorn has formulated concepts of influence, power and authority in terms of modal relationships, with the concepts distinguished on the bases of compliance (46). According to Schermerhorn, influence is defined as the ability of one person to originate action for another person. Power is a form of influence but not identical with it. Power is defined as

...the processual relation between two parties modally characterized by (1) asymmetrical influence, in which a perceptible probability of decision rests in one of the two parties, even over the resistance of the other party; and (2) the predominance of negative sanctions (threatened or actual) as a feature of behaviour in the dominant party (46, p. 12).

The exception to (2) is the case of charisma, where the follower is lured, and the predominate sanctions may be positive. Authority is defined as socially sanctioned power. Authority then is subsumed under power, and power is subsumed under influence. Relationships may exist which may be termed influence relationships as distinguished from power or authority relationships. Influence relationships may be symmetrical as in the case of mutual friendship, or

casual relationship, or they may be asymmetrical as in the case of popularity, where one person likes to be with another person, but not to follow him. Influence relationships are typified by the predominance of positive sanctions.

This formulation seemed to be the most advantageous for use in this empirical study. The three concepts are clearly defined, compared with, and distinguished from each other, and seem to be close to the popular usage of the terms. From this formulation, Schermerhorn has developed a schema of relationships reproduced in Figure I (p. 21), according to which the interpersonal influence relationships found in organizations may be readily classified (46, p. 9).

Typologies of Influence Relationships

In this study, the concern is not with the exercise of influence in certain specific instances but rather with the modal influence relationships which develop as a result of the normal functions of the organization.

Where the functions and technology of an organization are varied and complex, an intricate pattern of inter-dependence is almost always formed. A person's behaviour on the job is not a matter of concern to his supervisor alone. Many others need to have him perform in (more or less) specified ways if they are to carry out their functions and meet their objectives adequately. They have a vested interest in what he does and how he does it. This part stems largely from the formal division of labour and the resultant requirement for coordination and integration of effort. It also grows out of the more personally defined needs and objectives of each of the person's immediate associates (33, p. 189).

French and Raven would seem to agree with the usefulness of the position taken in this study. In discussing the exercise of power in

organizations, they say,

The concept of power has the conceptual property of potentiality; but it seems useful to restrict this potential influence to more or less enduring power relations... by excluding from the definition of power those cases where the potential influence is so momentary or so changing that it cannot be predicted from the existing relationship. Power is a useful concept for describing a social structure only if it has a certain stability over time; it is useless if every momentary social stimulus is viewed as actualizing social power (25, p. 152).

There have been many studies of hierarchical influence relationships in organizations such as Argyris' study of relationships at the executive level (3), the study by Kahn et al. of hierarchical relationships in manufacturing organizations (33), and Peabody's comparative study of authority relationships in an elementary school, a public health department, and a police department (43). There have also been many studies of horizontal influence relationships such as that of Roethlisberger and Dickson (45), the study of informal relations in a school by Iannaccone (32), and the study of the extent of informal groupings in schools by Low (35). But according to the systems model, to understand how a system functions, we must study the reciprocal vertical relations and the reciprocal horizontal relationships. To the best of the knowledge of this researcher a study of this type has not been carried out in an educational organization.

In studying influence relationships in an organization, it is necessary to use some typology of relationships so that these relationships may be systematically categorized. French and Raven have developed an interesting typology of power, with the different types of power defined in terms of the bases which give rise to a given type

of power. They define five general types of interpersonal power, Legitimate Power, Reward Power, Coercive Power, Expert Power, and Referent Power (25, p. 155 ff.). This typology was used by Kahn et al in their study of hierarchical relationships in manufacturing organizations (33). This typology would seem to be most useful in a study of hierarchical relations, in organizations where the sanctions on which the types of power are based are highly visible.

Schermerhorn's Typology of Influence Relationships

From his definitions of influence, power and authority, Schermerhorn has developed a typology of influence relationships differentiated in terms of the bases for compliance, the emotional orientation of the person complying, and whether or not the relationship is symmetrical or asymmetrical (46, Chap. 1). The following discussion is drawn from Schermerhorn's Society and Power, Chapter I (46).

Schermerhorn's typology is cast in terms of pair relationships. However, as Schermerhorn has stated,

...in any given case, one or both members of the pair represent values or norms of a group, institution, or society transcending them. That is, what each individual does is more than a singular, unique set of acts; it arises from his cultural learning and is therefore the expression of a role. Since he acts as a group member and not purely in his own individual capacity, his behaviour is patterned by group expectations, loyalties, preferences, and beliefs. Thus it is impossible to discuss pair interaction by itself... (46, p. 10)

Symmetrical Pair Relationships. The first of these types is that of mutual friendship. In this case, relations between friends

FIGURE I

INFLUENCE AND POWER IN THE PAIR RELATIONSHIP

<u>Emotional Orientation</u>	<u>Symmetrical Relations of Influence</u>	<u>Asymmetrical Relations of Influence</u>
<u>Positive</u>	<u>Mutual Friendship</u> (Emotional accompaniment: affection)	1. <u>Popularity</u> —liking to be with, but not following 2. <u>Modeling after the person</u> (idealization) 3. <u>Following the person's example or command</u> (charisma) (Emotional accompaniment: lure, attraction, spontaneity)
<u>Ambivalent</u>	<u>Ambivalent or Uncertain Pair Relationship</u> (Emotional accompaniment: alternating identifications and antagonisms)	1. <u>Submission to leader or Dominant figure who Embodies Informal Group Norms</u> 2. <u>Submission to Dominant Figure as Rational Expert</u> 3. <u>Submission to Dominant Person as Institutional Figure</u> (Emotional accompaniment: constraint, respect)
<u>Negative</u>	<u>Evenly Matched Conflict</u> (Emotional accompaniment: fear, hostility)	<u>Unevenly Matched Conflict</u> Submission to dominant person as figure of superior strength (Emotional accompaniment: fear, hostility)
<u>Indifferent</u>	<u>Casual Relations</u> Each initiates action equally for other without emotional involvement (Emotional accompaniment: neutrality)	<u>Casual Relations</u> Submission to dominant figure without emotional involvement (Emotional accompaniment: neutrality)

KEY: All relations portrayed are those of influence; those within the broken line are also relations of power. Note the limited set of relations subsumed under authority. (46, p. 9)

are those of easy camaraderie, sharing, and permissiveness. The idea of power seldom occurs. Several things account for this: (1) The relationship is one between equals. Thus the first person influences the second about as often as the second person influences the first. (2) Intense liking or affection on both sides supplies the motive for the relation. (3) Both persons refer their behaviour to a norm or value standard of cooperativeness and mutuality. (4) Rewards predominate over penalties in friends' conduct toward each other.

A second type of symmetrical relationship also appears to exclude power. This is the case of casual relations between two persons, where each may initiate action for the other almost equally but without involvement. This is the symmetry of indifference.

The third type of symmetrical relationship introduces power. This is the case where the relationship is one of alternating identifications and antagonisms. Here, though symmetry of influence occurs, it almost certainly involves a power struggle with each manipulating the other and shifting the balance toward negative sanctions from time to time. These characteristics often appear in uncertain pair relations mistakenly called friendships.

The fourth type is one of evenly matched power, where the persons are relatively equal in strength, cunning and intelligence. The relationship is symmetrical since they are evenly matched, yet each has the object of mastery over the other.

Asymmetrical Pair Relationships. Since symmetry is an ideal limit seldom achieved, there are many more asymmetrical than

symmetrical relationships. The special characteristic of asymmetry is imbalance, where the first member of a pair initiates more action for the second than the second does for the first.

The first three types of asymmetrical relationships may be grouped as they are all based to some degree on attraction. In the first of these, one member of the pair, because of special qualities attractive to the other, motivates the other to want to be with him, though not necessarily to follow him. There seems to be agreement in the literature that popularity is not identical with power.

The second of these types, in which one member of the pair motivates the other to imitate his behaviour, using it as a model, is a marginal case. If he issues no directives, he seems to be like the popular figure. To the extent that he affects behaviour in the direction of a role model, he seems to have power. To the extent that he embodies a norm or ideal accepted by the other person, he has greater power than the popular figure and moves toward the charismatic position.

The third of these types is where one member of the pair is a charismatic leader, who is unquestionable endowed with socially sanctioned power. His follower or followers are attracted not only by his personal magnetism, but because he embodies, often in novel ways, well-established values.

The next five types of asymmetrical relationships may be grouped as they are based on pressure or urgency from above and submission or obedience from below. The compliance attitude here is

remarkably different. In the case of attraction there is spontaneity, while under pressure or urgency there is effort and constraint.

The first of these types is where one person submits to a dominant figure who embodies informal group norms, who has objectified in his own person the values and standards of the group.

The second of these types is where one person submits to a dominant person who is an expert, who has rational qualifications. Here the expert assumes a superordinate position, and the less expert accepts advice or command.

The third of these types is where one person submits to another in view of his office, that is, to an institutional figure. The deference is to the power of the position rather than to the person who occupies the position.

In each of these three types the subordinate experiences constraint or respect, and feels a certain ambivalence, with at least latent resistance or antagonism.

The fourth of these types is straight forwardly coercive. Submission may be instantaneous but it is reluctant and fearful; it lacks the credence of principle that accompanies obedience to authority. The subordinate here does not regard the superordinate's power as being legitimate.

The fifth type of asymmetrical relationships is that of the casual and habitual, taking place without emotional involvement. Routine often dulls the response to authority and power. In time, submission to one dominant figure after another becomes an unthinking

custom. Perhaps it is necessary for this habitual reaction to occur as the basis for regular order.

Schermerhorn's typology of influence relationships has been chosen as the most useful typology for this study as it provides a systematic framework in which to order all of the reciprocal vertical and horizontal relationships which may be found within an organization.

Typologies of Organizations

All organizations may be analysed as systems. Organizations have many characteristics in common, however they also have many diverse characteristics. These differences could well affect the nature of the influence relationships in each type of organization. Therefore for the purpose of analysing influence relationships, it would be advantageous to classify organizations into different types.

Organizations may be classified on the obvious bases of ownership, size, function and holders of office, but it would seem to be more fruitful to classify organizations in terms of developed typologies based upon organization theory. Several of these typologies have been developed. Parsons has developed a typology based upon the four main categories of the functional imperatives of social systems, which are,

...the value system which defines and legitimizes the goals of the organization, the adaptive mechanisms which concern mobilization of resources, the operative code concerned with the mechanisms of the direct process of goal implementation, and finally the integrative mechanisms (42, p. 57).

This basic classification of the functional imperatives of social

systems was used to establish points of reference from which, "...the broadest outline of a proposed classification of organizations was sketched" (42, p. 57).

The four broad categories of organizations sketched were:

(1) organizations oriented to economic production, such as business firms; (2) organizations oriented to political goals, which would include most organs of government; (3) integrative organizations, which would include such organizations as the courts, political parties and hospitals; (4) pattern-maintenance organizations such as churches and schools (42, p. 44-47).

Parsons felt that further development of his preliminary conceptual scheme would help to codify our knowledge of organizations systematically (42, p. 58).

Hughes has classified organizations into five types according to the basic models he noted in society (9, p. 41). These are: (1) voluntary associations of equals who join voluntarily for a specific purpose (e.g. social clubs, professional associations); (2) the military model (e.g. the army, navy, and airforce); (3) the philanthropic model (e.g. hospitals, the Red Cross); (4) the corporate model (e.g. all large business concerns); and (5) family businesses. This typology does not seem to be useful in classifying educational organizations.

The typology developed by Blau and Scott (13, p. 42-45) is based upon the prime beneficiary of the operation of the organization. Four types of organizations, based upon the prime beneficiary variable,

are identified. These are: (1) mutual-benefit associations, where the prime-beneficiary is the membership; (2) business concerns, where the owners are the prime beneficiary; (3) service organizations, where the clients are the prime beneficiary; and (4) commonweal organizations, where the public-at-large is the prime beneficiary.

Blau and Scott theorize that special problems are associated with each type of organization, and that these problems affect the structure, goals, internal relations, and external relations of each organization type. The major problem of mutual benefit associations, it is claimed, is the maintenance of membership control, while the central problem of business firms is operational efficiency. Service organizations have problems over conflict between service to clients and efficient administrative procedures. The central problem of commonweal organizations is the maintenance of democratic public control of policy. The difficulty here is in classifying schools. It could be argued that public schools are service organizations, equally as well as it could be argued that public schools are commonweal organizations.

A Typology of Organizations Based Upon Compliance Relationships

The typology, which seemed to be most useful in this study, was the typology developed by Etzioni based upon the nature of the compliance structure in the organization (23). By the term compliance, Etzioni

...refers both to a relation in which an actor behaves in accordance with a directive supported by another actor's power,

and to the orientation of the subordinated actor to the power applied. Supported means that those who have power manipulate means which they command in such a way that certain other actors find following the directive rewarding, while not following it incurs deprivations (23, p. 1).

Power is defined by Etzioni as "an actor's ability to induce or influence another actor to carry out his directives or any other norm he supports" (23, p. 2). This would seem to be synonymous with Schermerhorn's concept of influence. Etzioni defines authority as being legitimate power (23, p. 15) which agrees with Schermerhorn's definition.

Etzioni assumes three major sources of social control, coercion, economic assets, and normative values (23, p. XV). From these assumptions Etzioni derives three types of power (23, p. 4 ff.). Coercive power rests on physical sanctions, or controlling through force satisfaction of such needs as food, sex, comfort etc. Remunerative power is based on control over material resources and rewards through salaries and wages, and services. Normative power

...rests on allocation and manipulation of symbolic rewards and deprivations..., manipulation of mass media, allocation of esteem and prestige symbols, administration of ritual, and influence over the distribution of "acceptance" and "positive response" (23, p. 5).

There are two kinds of normative power: (1) Pure normative power is found more frequently in vertical relationships and rests on the manipulation of esteem, prestige and ritualistic symbols. (2) Social power is more frequently found in horizontal relationships, in informal or primary groups, and rests on the manipulation of and allocation of acceptance and positive response. Both rest on the manipulation of

the same set of means, the manipulation of symbolic rewards (23, p. 6).

The orientation of the subordinated actor in a power relationship can be positive (commitment) or negative (alienation). This is determined in part by the degree to which the power applied is considered legitimate, and in part by its congruence with the line of action he would desire. This orientation is referred to as involvement (23, p. 2).

There can be three kinds of involvement (1) Alienative, characterized by intense negative orientation. (2) Calculative, characterized by either negative or positive involvement of low intensity, and (3) Moral, characterized by intense positive orientation. There can be two kinds of moral involvement: (1) pure moral involvement based on internalization of norms and identification with authority, and (2) social moral involvement based on resistivity to pressure of primary groups (23, p. 9).

The two dimensions of power and involvement constitute the compliance relationship. The combinations of the three types of power and the three types of involvement produce the typology of nine types of compliance relationships (23, p. 12) shown in Table I.

TABLE I
A TYPOLOGY OF COMPLIANCE RELATIONS

Kinds of Power	Kinds of Involvement		
	<u>Alienative</u>	<u>Calculative</u>	<u>Moral</u>
<u>Coercive</u>	1	2	3
<u>Remunerative</u>	4	5	6
<u>Normative</u>	7	8	9

Etzioni suggests that diagonal cases 1, 5 and 9 are found more frequently than the other six types, because types 1, 5 and 9 are congruent relationships of power and involvement, whereas the other six combinations are incongruent. Etzioni hypothesizes that congruent relationships are more effective than incongruent relationships. In discussing the effective application of power, Etzioni suggests that,

Remuneration is at least partially wasted when actors are highly alienated, and therefore inclined to disobey despite material sanctions; it is also wasted when actors are highly committed, so that they would maintain an effective level of performance for symbolic, normative rewards only.

Coercive power is probably the only effective power when the organization is confronted with highly alienated lower participants. If, on the other hand, it is applied to committed or only mildly alienated lower participants, it is likely to affect adversely such matters as morale, recruitment, socialization and communication.... (23, p. 13).

Etzioni further hypothesises that,

...to the degree that the environment of the organization allows, (1) organizations tend to shift their compliance structure from incongruent to congruent types, and (2) organizations which have congruent compliance structures tend to resist factors pushing them toward incongruent compliance structures (23, p. 14).

Thus organizations tend to emphasize only one means of power, relying less on the other two (23, p.7). The three congruent compliance categories are known as coercive, utilitarian and normative (23, p. 14). These three categories are used to classify organizations for purposes of comparative analysis. Schools are classified as one type of normative organization (23, p. 40).

Organizations can also be classified in terms of the two variables, organizational goals, and compliance. Organizational goals

are classified into three types, order, economic and cultural.

Organizations with order goals are established to control,

...actors who are deviants in the eyes of some social unit the organization is serving (frequently society) by segregating them from society and by blocking them from further deviant activities. ...some merely segregate deviants; others segregate and punish; and still others eliminate deviants altogether (23, p. 73).

Organizations with economic goals produce commodities and services supplied to outsiders,

...these include not only the manufacturing industries, but also various service organizations, from the post office and insurance companies to movie theatres... (23, p. 73).

Organizations with cultural goals,

...institutionalize conditions needed for the creation and preservation of symbolic objects, their application, and the creation or reinforcement of commitments to such objects (23, p. 73).

The term culture as used here includes the belief systems and the value orientations of society (23, p. 73). Churches and schools would be classified as organizations with cultural goals. The typology of goals and compliance is shown in Table II (23, p. 74).

TABLE II
A TYPOLOGY OF GOALS AND COMPLIANCE

Kinds of Compliance	Kinds of Goals		
	<u>Order</u>	<u>Economic</u>	<u>Culture</u>
<u>Coercive</u>	1	2	3
<u>Utilitarian</u>	4	5	6
<u>Normative</u>	7	8	9

Etzioni suggests that the diagonal cases of 1, 5 and 9 are

found more frequently than the other six types, because types 1, 5 and 9 are congruent relationships of organizational goals and mode of compliance, whereas the other six combinations are incongruent.

Etzioni hypothesizes that congruent relationships are more effective in goal achievement than incongruent relationships (23, p. 74) and thus congruent relationships are more likely to be found than incongruent relationships. Etzioni classifies schools as organizations with cultural goals.

So far, the discussion has been concerned primarily with vertical relationships within the organization, but sub-collectivities may coalesce in organizations so that there are internal boundaries in some of the organizational activities. Similarly, the "polity of the organization may be split" (23, p. 94) so that members direct varying proportions of their activities according to their own standards. Etzioni holds that these boundaries may be determined in three major ways (23, p 74):

1. The degree to which power participants hold to standards of their own defining legitimate and desirable action.
2. The degree to which the relationships among lower participants are inclusive or exclusive of higher participants and vice-versa; in other words the degree to which relationships are intra-versus inter-rank.
3. The degree to which subcollectivities have a polity of their own, that is have a differentiated set of elites, instead of accepting the control of the elites of the organization.

Modal compliance relationships, both vertical and horizontal, result from the predominant means of control the organization exerts over its members. Etzioni suggests that the major means of control in

normative and particularly professional organizations is based on prolonged and careful selection, and socialization in training schools or on the job, which precedes recruitment to autonomous performance positions.

As a consequence, norms are as a rule highly internalized, so that informal controls and symbolic sanctions are highly effective (23, p. 52).

Closely related to both vertical and horizontal control is the distribution of charisma in the organization. Charisma is defined as the "ability of an actor to exercise diffuse and intense influence over the normative orientations of other actors." Etzioni poses three types of charisma distribution, according to the type of organization (23, p. 207). (1) T-structure, in which charisma is concentrated in top positions. This structure is most common in utilitarian organizations. (2) L-structure in which all line positions are held by charismatics. This structure is most common in normative organizations. (3) R-structure in which charisma is limited to one or more ranks other than the top rank. This structure is found in some normative organizations (e.g. doctors in hospitals).

Charismatic positions are not found in coercive organizations. Schools seem to fall between the L type and the R type organizations. Etzioni makes the point that the more normative power is relied upon, the greater the need for moral involvement, and the greater the need for charisma (23, p. 210), thus for organizations which rely primarily on normative power, it is functional for the higher ranks to have charisma over all other ranks (23, p. 240). He also hypothesizes

that,

...the more continuous and the closer the control elites have over their subordinates, the less likely they are to have charismatic power over them; the more intermittent and distant or lax the control, the more likely charisma is to be developed and sustained (23, p. 213).

Control in L organizations differs from control in other types of organizations and this control differentiation is not based directly on the kind of performances which are supervised, but on the kind of compliance effective performance requires (23, p. 268). The first application of negative sanctions is usually highly informal and private (23, p. 241), and dismissal is not abrupt, but follows several stages (23, p. 242). Forced transfer is a very powerful sanction (23, p. 253).

Involvement and Influence Relationships

The more the elements of a typology used to categorize the influence relationships found within an organization are discrete and exhaustive, the more knowledge is gained about those relationships. Thus Schermerhorn's typology of influence relationships would seem to be superior to the more gross categories of power and of involvement posed by Etzioni. However, the three categories of involvement used by Etzioni, and the categories of influence relationships developed by Schermerhorn appear to be related. A suggested relation between these two typologies is set out in Figure II (page 35).

FIGURE II

THE RELATION BETWEEN INVOLVEMENT AND INFLUENCE RELATIONSHIPS

	Kinds of Involvement		
	<u>Alienative</u>	<u>Calculative</u>	<u>Moral</u>
Kinds of	Evenly matched	Casual relations	Mutual
Influence	conflict	(symmetrical)	friendship
Relation-	Unevenly	Ambivalent or	Modeling after
ships	matched	uncertain pair	the person
	conflict	relationships	
		Popularity	Following
		Submission to	the person's
		leader or dominant	example or
		figure who embodies	command
		group norms	
		Submission to	
		dominant figure as a	
		rational expert	
		Submission to	
		dominant person as	
		institutional	
		figure	
		Casual relations	
		(asymmetrical)	

Sub-Problems and Hypotheses

Guided by organization theory, especially the systems model and Etzioni's compliance structure typologies, as well as by the specific concept of influence used in the modal pair relationship model of Schermerhorn, it seemed that the problem could be analysed in terms of

the following sub-problems:

1. What is the nature of the influence structures existing within the organization?
2. What is the relationship of the informal primary groups in the organization to the influence structures existing within the organization?
3. What is the nature of the modal influence relationships existing within the organization?
4. What is the nature of the relationships between teachers and administrators within the organization?

Analysis of Sub-Problem 1.0

"What is the nature of the influence structures existing within the organization?"

The organization under study was limited to the professional personnel interacting intimately in the functional processes of the organization. Being an open system, this organization interacted with its suprasystem. It is important to note that there would be many influence inputs into the system from the suprasystem, from sources which were not included within the limits of this study. Thus the purposes and processes of the organization would be influenced by forces impinging from outside the limits of this study, as well as by forces generated within the defined organization. However, for any forces impinging from the suprasystem to affect the processes of the system, these forces would be introduced by a member of the defined

system. Therefore this study was concerned with forces originating outside, as well as forces originating within the system. However no attempt was made to trace the origin of the forces.

According to Schermerhorn (46, p. 14) we may only understand the functional processes of a system if we understand the modal influence relationships between the individuals who are the parts of the system. But the particular system under study was an hierarchically structured organization within which influence resources were differentially distributed in terms of the formal organizational structure. Thus those members occupying designated authority positions had legitimized influence and communication resources not available to those members not occupying designated authority positions. Also, those members who had no positional authority, but who occupied positions of responsibility for coordinating some functional processes of the organization, had at least communication resources not available to members not occupying these positions. The relative amount of influence any member may exercise depends upon the resources at his disposal, and the skill with which he uses these resources (19, Chap. 5). In differentiating relative amounts of influence accruing to individuals, care must be taken to delineate the specific sphere of activity in which the individuals are acting, that is, the specific sphere of activity in which the individuals are more or less influential. Thus, it may be appropriate to differentiate relative amounts of influence over the total activities of an organization, only if an examination of the data differentiating relative amounts of

influence in all of the specific spheres of activity leads to the conclusion that some individuals are in fact influential in all spheres of organizational activity (19, Chap. 5), (46, Chap. 6). In summarizing research in this area, Cartwright stated that,

...a person may be said to have, or not to have, power over another depending upon what criterion of influence is employed—he may be able to influence a particular person with respect to some things but not others. It follows then, that the exact nature of the interpersonal power structure of a group will depend upon the "topic" of influence being considered (17, p. 650).

For this reason, certain dimensions of the activities of the organization were delineated for study.

The dimensions of the activities selected for study were delineated in the form of twelve task topics. As the system studied was a public school organization, the primary goals of the organization would be educational goals. These educational goals could be achieved only through interaction between pupils and members of the instructional staff of the school. Each of the task topics selected was related to this interaction. Decisions made in regard to any of these task topics would affect the interaction between pupils and members of the instructional staff. It was assumed that this set of twelve task topics included most organizational activities of the instructional staff members related to the achievement of the primary goals of the organization. Thus it was assumed that a description of the influence structures on this set of twelve task topics would be a description of the influence structures in the organization related most closely to the achievement of the primary goals of the

organization.

The task topics chosen were those which seemed to be related most closely to the goals of the organization and to the tasks most common to all members of the organization. These task topics were:

Task Topic 1, Scheduling. The selection of courses to be offered, the distribution of instructional time, and the time-table scheduling of teachers and pupils.

Task Topic 2, Instructional facilities. The provision of facilities, equipment and supplies for instruction.

Task Topic 3, Teaching assignment. The allocation of teaching assignments.

Task Topic 4, Course content. The selection of the content to be taught in each course.

Task Topic 5, Teaching methodology. The selection of the methodology of instruction to be used in each course.

Task Topic 6, Classroom organization. Classroom organization for instruction.

Task Topic 7, Student evaluation. The establishment of student evaluation practices.

Task Topic 8, Grading and promotion. The establishment of student grading and promotional practices.

Task Topic 9, Student discipline. The establishment of student discipline practices.

Task Topic 10, Student accounting. The establishment of student accounting practices.

Task Topic 11, Extra-curricular activities. Practices concerning extra-curricular activities.

Task Topic 12, Parent relationships. Practices concerning relationships with parents.

As all of these task topics were related to the purposes of the organization and to the every day functions of the organization, it was to be expected that influence forces pertaining to these task topics would be generated both within the organization, and in the suprasystem of the organization. But any influence force affecting the functions of the organization would be sanctioned by one or more individuals holding formal positions of authority.

Hypothesis 1.1 It was hypothesized that administrators would be highly influential on all task topics.

It was also argued that those members who held no formal positional authority, but who occupied positions of responsibility in coordinating some functional processes of the organization would, because of the nature of their position, be involved with any influence force which fell within the sphere of their responsibility.

Hypothesis 1.2 It was hypothesized that coordinating personnel would be highly influential within the sphere of their responsibilities.

Of the task topics selected for this study, Task Topics 1, 2, 3, 7, 8, 9, 10, 11 and 12 may be termed organizational in that they pertained to all instructional processes of the organization, whereas Task Topics 4, 5 and 6 would differ with differentiated instructional tasks, and therefore fall more within the specialized professional

competence of the individual teachers.

Hypothesis 1.3 It was hypothesized that more classroom teachers would be influential on Task Topics 4, 5 and 6, than on Task Topics 1, 2, 3, 7, 8, 9, 10, 11 and 12.

Hypothesis 1.4 It was hypothesized that some classroom teachers would be highly influential on Task Topics 4, 5 and 6.

Since all twelve task topics were chosen because they related closely to the purposes of the organization and to the tasks most common to all members of the organization, then all twelve task topics related to the professional activities of all members of the organization. MacKay concluded that even in schools which could be described as non-bureaucratic, in the Weberian sense of bureaucracy, and in which emphasis on technical competence was a characteristic of organizational behaviour, teachers desired a greater part in the organizational planning in the school (36, p. 172).

Hypothesis 1.5 It was hypothesized that classroom teachers would desire to have a greater opportunity to be influential on each task topic.

Hypothesis 1.6 It was hypothesized that there would be a relationship between the extent the professional competence of teachers was used in organizational planning, and the extent that well developed lines of communication between teachers and coordinators and administrators were found to exist within the organization.

It would seem reasonable that influence resources would be differentially distributed among members of the organization not only

in terms of formal position, but also in terms of the characteristics of those members, such as age, amount of professional training, amount of professional experience, and amount of experience within the organization. McCabe found in the Junior Colleges he studied, that the variable years of experience within the organization was related to the relative amounts of influence in a curvilinear way. In curriculum matters, the members with the least and with the most experience in the organization were the most influential, while the members in the middle range of experience were the least influential (14, p. 113).

Hypothesis 1.7 It was hypothesized there would be a relationship between the relative amount of influence accruing to members and the following characteristics of members; age, amount of professional training, amount of professional experience, and amount of experience within the organization.

Analysis of Sub-Problem 2.0

"What is the relationship of the informal primary groups in the organization to the influence structures existing within the organization?"

Many studies have been made of the informal structures in schools, but without careful definition there may be confusion between the terms formal structure, functional processes, and informal structure. Informal structures or informal groups are often defined as resulting from primary face to face relationships, usually based on

social interaction, and usually fulfilling the individual social needs of the members of the group. The informal groups are clearly differentiated from the formal structure of the organization, and are often viewed as functioning in opposition to the formal structure (5, Chap. 12), (45). The confusion results from failing to distinguish between a group which forms voluntarily on the basis of individual social needs, and the work group which forms because the activities of the participants in the functional processes of the organization are related and interdependent. Dubin makes a clear distinction between the formal structure of the organization, the non-formal structure, which is composed of the functional relationships through which the organizational tasks are accomplished, and the informal structure which is formed through voluntary association to meet the individual needs of its members (20, p. 95). The non-formal and the informal structures may or may not be congruent, and may or may not be related. In this study the task oriented influence structures discussed under Sub-Problem 1.0 were the functional processes of the organization, or in Dubin's terms, the non-formal organization. To differentiate between the task oriented influence structures and the informal groups, the term informal groups was defined to mean groups of members who come together voluntarily and function to meet the individual social needs of their members.

These informal social structures may or may not be congruent with task oriented influence structures, depending upon the bases of task oriented influence relationships, upon the extent to which the

organizational elites participated in the informal structures, and upon the polity of the informal social structures.

Hypothesis 2.1 It was hypothesized that the practices desired by the members of an informal structure would tend to be congruent with the practices of the organization, if the influential elites of the organization functioned within the informal structure.

Analysis of Sub-Problem 3.0

"What is the nature of the modal influence relationships existing within the organization?"

Because of the assumption that Schermerhorn's typology of modal influence relationships was a useful model to use in analysing the modal influence relationships within a public secondary school organization, it was reasonable to expect to find examples of each of the typified relationships within the organization. However, it was also reasonable to expect to find the incidence of relationships differentiated because of differential organizational positions held by the members in the pair relationship. That is, it was expected that certain vertical relationships would be found existing between a member who occupied a position of organizational authority and a member who did not, and that certain other horizontal relationships would be found existing between two members, neither of whom occupied a position of organizational authority.

Hypothesis 3.1 It was hypothesized that influence relationships between teachers and administrators would be primarily asymmetrical

power relationships.

Hypothesis 3.2 It was hypothesized that influence relationships between teachers may be of any type with the exception of the asymmetrical authority relationship characterized by submission to a dominant person as an institutional figure.

Analysis of Sub-Problem 4.0

"What is the nature of relationships between teachers and administrators within the organization?"

Because of the assumption that Etzioni's compliance structure typology provided a useful model for the study of a public secondary school organization, the school organization under study could be classified as a normative organization.

Hypothesis 4.1 It was hypothesized that the sanctions used by administrators to gain the compliance of teachers would be perceived by the teachers to be predominantly normative, rather than remunerative or coercive.

It was reasonable to assume that individuals would attempt to influence those on whom they were dependent and those who exercised influence over them. Thus it was reasonable to assume that subordinates would desire to influence superordinates. As has already been stated, the extent to which an individual may be influential depends upon the resources he has at his disposal, and the skill with which these resources are used. In the asymmetrical relationship of superordinate and subordinate, the superordinate has resources the

subordinate does not have. In terms of normative power the superordinate has control over the allocation and manipulation of more symbolic rewards and deprivations than does the subordinate, so that in normative organizations, the superordinate has greater resources of normative power than does the subordinate. But in normative organizations, even though the first level of sanctions applied by a superordinate may be normative sanctions, the second and third levels of sanctions may well be remunerative or coercive. The subordinate, at the first level, has limited normative sanctions which may be applied such as expressions of approval or disapproval, and can apply no remunerative or coercive sanctions. Therefore the subordinate usually appears to be relatively powerless in gaining influence over a superordinate. However, according to Etzioni, organizations classified as normative organizations adopt this type of compliance structure because the congruent type of member involvement is most effective in achieving the purposes of the organization. It was assumed that all members in normative organizations would be sensitive to normative influence. It was argued that superordinates in normative organizations would be sensitive to normative sanctions imposed by subordinates, making available to subordinates effective resources which could be used by subordinates in attempting to influence superordinates.

Hypothesis 4.2 It was hypothesized that the sensitivity of an administrator to the use of normative sanctions by teachers, as perceived by teachers, would be related to the degree that the

sanctions used by the administrator to gain the compliance of teachers would be perceived by teachers to be predominantly normative.

Etzioni assumes that moral involvement is congruent with normative influence relationships, but it was argued that the type of relationship would also be related to the normative sanctions used, whether these sanctions were predominantly positive or negative. It was argued that a subordinate's moral involvement, which assumes the internalization of organizational norms, would be strengthened if the normative sanctions used were predominantly positive.

Hypothesis 4.3 It was hypothesized that where administrators were perceived by teachers to use predominantly normative sanctions, the modal influence relationships between teachers and administrators would tend to be positive, or positive ambivalent relationships, to the extent that the normative sanctions used by administrators to gain the compliance of teachers were perceived by teachers to be predominantly positive normative sanctions.

Related to the perceived mode of supervision, is the concept of dependency. The degree to which a subordinate is dependent upon a superordinate is related not only to the closeness of supervision, but also to the mode of evaluation, the means of reporting the evaluation and the consequences which may flow from the reporting of the evaluation. Kahn et al. suggest that the higher the dependency of the subordinate on the superordinate, the more certain is the compliance, and the more calculative the relationship (33, p. 190 ff.).

Hypothesis 4.4 It was hypothesized that the type of influence

relationship existing between a teacher and an administrator would be related to the degree that the teacher perceived himself to be dependent upon the administrator.

Summary of Sub-Problems and Hypotheses

Sub-Problem 1.0

"What is the nature of the influence structures existing within the organization?"

Hypothesis 1.1. It was hypothesized that administrators would be highly influential on all task topics.

Hypothesis 1.2. It was hypothesized that coordinating personnel would be highly influential within the sphere of their responsibilities.

Hypothesis 1.3. It was hypothesized that more classroom teachers would be influential on Task Topics 4, 5 and 6, than on Task Topics 1, 2, 3, 7, 8, 9, 10, 11 and 12.

Hypothesis 1.4. It was hypothesized that some classroom teachers would be highly influential on Task Topics 4, 5 and 6.

Hypothesis 1.5. It was hypothesized that classroom teachers would desire to have a greater opportunity to be influential on each task topic.

Hypothesis 1.6. It was hypothesized that there would be a relationship between the extent the professional competence of teachers was used in organizational planning, and the extent that well developed lines of communication between teachers and coordinators and administrators were found to exist within the organization.

Hypothesis 1.7. It was hypothesized there would be a relationship between the relative amount of influence accruing to members and the following characteristics of members; age, amount of professional training, amount of professional experience, and amount of experience within the organization.

Sub-Problem 2.0

"What is the relationship of the informal primary groups in the organization to the influence structures existing within the organization?"

Hypothesis 2.1. It was hypothesized that the practices desired by the members of an informal structure would tend to be congruent with the practices of the organization, if the influential elites of the organization functioned within the informal structure.

Sub-Problem 3.0

"What is the nature of the modal influence relationships existing within the organization?"

Hypothesis 3.1. It was hypothesized that influence relationships between teachers and administrators would be primarily asymmetrical power relationships.

Hypothesis 3.2. It was hypothesized that influence relationships between teachers may be of any type with the exception of the asymmetrical authority relationship characterized by submission to a dominant person as an institutional figure.

Sub-Problem 4.0

"What is the nature of relationships between teachers and

administrators within the organization?"

Hypothesis 4.1. It was hypothesized that the sanctions used by administrators to gain the compliance of teachers would be perceived by the teachers to be predominantly normative, rather than remunerative or coercive.

Hypothesis 4.2. It was hypothesized that the sensitivity of an administrator to the use of normative sanctions by teachers, as perceived by teachers, would be related to the degree that the sanctions used by the administrator to gain the compliance of teachers would be perceived by teachers to be predominantly normative.

Hypothesis 4.3. It was hypothesized that where administrators were perceived by teachers to use predominantly normative sanctions, the modal influence relationships between teachers and administrators would tend to be positive, or positive ambivalent relationships, to the extent that the normative sanctions used by administrators to gain the compliance of teachers were perceived by teachers to be predominantly positive normative sanctions.

Hypothesis 4.4. It was hypothesized that the type of influence relationship existing between a teacher and an administrator would be related to the degree that the teacher perceived himself to be dependent upon the administrator

BIBLIOGRAPHY FOR CHAPTER II

- (1) Allport, F. H., Theories of Perception and the Concept of Structure, (New York, Wiley, 1955).
- (2) Allport, F. H., "The J-Curve Hypothesis of Conforming Behaviour," Journal of Social Psychology, 5, 1934, pp. 141-183.
- (3) Argyris, C., Interpersonal Competence and Organizational Effectiveness, (Homewood, Illinois, Irwin-Dorsey, 1952).
- (4) Barber, B., Social Stratifications, (New York, Harcourt Brace and Co., 1957).
- (5) Barnard, C., The Functions of the Executive, (Cambridge, Mass.: Harvard University Press, 1938).
- (6) Becker, H., "Notes on the Concept of Commitment," American Journal of Sociology, Vol. 66, 1960, pp. 32-40.
- (7) Bendix, R., and S. N. Lipset, (eds.), Class, Status, and Power, (Glencoe: The Free Press, 1953).
- (8) Bennis, W. G., "Leadership Theory and Administrative Behaviour: The Problem of Authority," Administrative Science Quarterly, 4: 259-301, December, 1959.
- (9) Berelson, B. and Steiner, G. A., Human Behaviour, (New York, Harcourt, Brace and World, Inc., 1964).
- (10) Bierstadt, R., "An Analysis of Social Power," American Sociological Review, XV, December, 1950.
- (11) Blau, P. M., Bureaucracy in Modern Society, (New York, Random House, 1956).
- (12) Blau, P. M., The Dynamics of Modern Society, (Chicago, The University of Chicago Press, 1955).
- (13) Blau, P. M. and W. R. Scott, Formal Organizations, (San Francisco, Chandler Publishing Company, 1962).
- (14) Blocker, C. E. and R. H. McCabe, Relationships Between the Informal Organization and the Curriculum in Six Junior Colleges, (Austin, Texas, 1964).

- (15) Brecht, A., Political Theory, (Princeton, Princeton University Press, 1959).
- (16) Brecht, A., "How Bureaucracies Develop and Function," Annals of the American Society of Political and Social Science, 292, March, 1954.
- (17) Cartwright, P. and A. Zander (eds.) Group Dynamics: Research and Theory, (Evanston, Illinois, Row Peterson and Co., 1953).
- (18) Cooper, H. C. "Perceptions of Sub-group Power and Intensity of Affiliation with a Larger Organization," American Sociological Review, Vol. 26, 1961, pp. 272-274.
- (19) Dahl, R. A. Modern Political Analysis, (Englewood-Cliffs, New Jersey, Prentice-Hall Inc., 1961).
- (20) Dubin, R., Human Relations in Administration, (Englewood-Cliffs, New Jersey, Prentice-Hall Inc., 1961).
- (21) De Grazia, S. "What Authority is Not," American Psychological Society Review, LIII, June 1959, pp. 321-331.
- (22) Eisenstadt, S. N., "Bureaucracy, Bureaucratization and Debureaucratization" in A. Etzioni, Complex Organizations: A Sociological Reader, (New York, Holt, Rinehart and Winston, 1961) pp. 268-277.
- (23) Etzioni, A., A Comparative Analysis of Complex Organizations, (Glencoe, Illinois, The Free Press, 1961).
- (24) Etzioni, A., Modern Organizations, (Englewood-Cliffs, New Jersey, Prentice-Hall Inc. 1964).
- (25) French, J. R. P. and B. Raven, "The Bases of Social Power," in D. Cartwright, ed., Studies in Social Power, (Ann Arbor, Research Center for Group Dynamics, Institute for Social Research, 1959).
- (26) Gouldner, M. P., "Dimensions of Organizational Commitments," Administrative Science Quarterly, Vol. 4, 1960, pp. 488-490.
- (27) Griffiths, D. E., "Administrative Theory and Change in Organizations," in B. M. Miles, Innovation in Education, (New York, Bureau of Publications, Teachers College, Columbia University, 1964).

- (28) Haire, M., "Biological Models and Empirical Histories of the Growth of Organizations," in M. Haire, Modern Organization Theory, (New York, John Wiley and Sons, 1959).
- (29) Hearn, G., Theory Building in Social Work, (Toronto, University of Toronto Press, 1958).
- (30) Homans, G. C., The Human Group, (New York, Harcourt, Brace and World Inc., 1950).
- (31) Hunter, F., Community Power Structure, (Chapel Hill, University of North Carolina Press, 1953).
- (32) Iannacone, L., "The Social System of an Elementary School Staff" (unpublished doctoral dissertation) Teachers College, Columbia University, 1958, reported in D. E. Griffiths, D. Clark, R. Wynn and L. Iannacone, Organizing Schools for Effective Education, (Danville, Illinois: The Interstate, 1961).
- (33) Kahn, R. L., D. M. Wolfe, R. P. Quinn, J. D. Snoek, Organizational Stress Studies in Role Conflict and Ambiguity, (New York, John Wiley and Sons, Inc., 1964).
- (34) Lasswell, H. D. and Kaplan, Power and Society, (New Haven, Yale University Press, 1950).
- (35) Low, L. E., "The Identification of Informal Groups and Informal Group Leadership in Selected Schools in Ohio," (unpublished doctoral Dissertation, Ohio State University, 1962).
- (36) MacKay, D. A., "An Empirical Study of Bureaucratic Dimensions and Their Relation to Other Characteristics of School Organizations," (unpublished doctoral dissertation, University of Alberta, 1964).
- (37) March, J. C. and M. A. Simon, Organizations, (New York, John Wiley and Sons, Inc., 1958).
- (38) Merriman, C. E., Political Power, (New York, McGraw-Hill Co., 1934).
- (39) Mills, C. Wright, The Power Elite, (New York, The Oxford University Press, 1959).
- (40) Moeller, G. H., "Bureaucracy and Teachers' Sense of Power," in Administrator's Notebook, Vol. XI, No. 3, November, 1962.

- (41) Newstadt, R. F., Presidential Power, (New York, John Wiley and Sons, Inc., 1960).
- (42) Parsons, T., Structure and Processes in Modern Societies, (Glencoe, Illinois, The Free Press, 1960).
- (43) Peabody, R. E., "Authority in Organizations," (unpublished doctoral dissertation, Stanford University, 1960).
- (44) Presthus, R. V., "Toward a Theory of Organizational Behaviour," American Sociological Quarterly, III, June, 1958, pp. 48-72.
- (45) Roethlisberger, F. J., and W. J. Dickson, Management and the Worker, (Cambridge, Harvard University Press, 1956).
- (46) Schermerhorn, R. A., Society and Power, (New York, Random House, 1961).
- (47) Scott, W. G., "Organization Theory: an Overview and an Appraisal," in J. A. Litterer, (ed.), Organizations: Structure and Behaviour, (New York, John Wiley and Sons, Inc., 1963).
- (48) Simon, H. A., Administrative Behaviour, (New York, MacMillan Company, 1961).
- (49) Simon, H. A., D. W. Smithbury and V. A. Thompson, Public Administration, (New York, Alfred A. Knopf, 1958).
- (50) Trask, A. E., "Principals, Teachers and Supervision: Dilemmas and Solutions," Administrator's Notebook, Vol. XIII, No. 4, December, 1964.
- (51) von Bertalanffy, L., "An Outline of General Systems Theory," British Journal of Philosophical Science, I, 1950.
- (52) Weber, M., The Theory of Social and Economic Organization, A. M. Henderson and Talcott Parsons (translators) and Talcott Parsons (ed.), (Glencoe, Illinois, The Free Press and Falcon's Wing Press, 1947).
- (53) Weiss, R. S. and E. Jacobson, "A Method for the Analysis of the Structure of Complex Organizations," in A. Etzioni, Complex Organizations: A Sociological Reader, (New York, Holt, Rinehart and Winston, 1961), pp. 453-454.

CHAPTER III

DESIGN AND PROCEDURES

I. DESIGN FOR SUB-PROBLEM 1.0

The problems concerned in attempting to measure influence quantitatively have been discussed thoroughly by Dahl (3, Chap. 6). The design used in this study in connection with sub-problem 1.0 is similar to that developed at the University of Texas and reported by Blocker et al. (2).

Influence Dimensions of the System

The measurable internal attributes or systems variables selected to be used in the attempts to quantify relationships and objects within the system give weight and shape to the system; they are the dimensions of the system. The dimensions selected in this design are communications, reliance and attributed influence. Research supports the assumption that these are important elements of influence. After a study of opinion leaders in mass communications, Katz concluded that

...it appears that influence is related (1) to the personification of certain values (who one is); (2) to competence (what one knows); and (3) to strategic social location (whom one knows) (11, p. 73).

In this quotation, (1) relates to a person's perceived importance or a person's attributed influence, (2) relates to a person's perceived competence which is an element in the percerver's willingness to rely

on the person's judgment, and (3) relates to a person's accessibility to communications.

The Communication Dimension

Three aspects of this dimension will be discussed. As the dynamics of the system under study were personal interactions, communication was the vehicle for activating the system. As put by Blocker et al.,

In analysing a communication from member X to member Y, one must recall that the psychological field of member Y is an open system. When X communicates to Y, system Y is modified by this intrusion (2, p. 16).

This was substantiated by Hovland in his experiment concerning acceptance of information from sources given favourable and unfavourable characteristics (9), and by Krugman's experiment in influencing taste in music (12, p. 392).

McCleary found networks of communication through which influence flowed (13), while Festinger et al. concluded that "once a social group is formed, the connections within it also function as channels of communication along which information and opinion flow" (4, p. 130). Thus the first aspect of the communication dimension was the number and direction of communications in the system.

There is evidence to indicate that influence flows through a system over multi-step communication channels. This has been described by French as follows:

Thus A influences B directly during the first unit, and B influences C toward his new opinion during the second unit. Thus A has indirectly influenced C by transmitting his opinion via B.

In this model, the power structure and the communication channels of the group are translated into a process of influence over time. In the first unit, any member A, influences only those recipients of his communication over whom he has direct power: in the second unit A's influence is also transmitted to those who are three steps removed from him in the power structure (6, p. 183).

Thus, the second aspect of the communication dimension is the multi-step channels of communication. Therefore, it is essential to know the amount of communication which flows through each of the members of the system. The third aspect of the communication dimension is the relative importance of each member in the communication dimension. As explained by Blocker et al.,

A member X will be considered important in the communication dimension to the degree that paths of communication develop, with X at the apex, over primary, secondary and tertiary units. The members in the tertiary unit will be considered within X's scope. The number of paths developed at the tertiary unit will be considered X's relative importance in the communication dimension; this will be termed communication weight (2, p. 17).

Therefore the third aspect of the communication dimension will be expressed as the communication weight of the members.

Research indicates that the development of norms within the group is directly related to the communication structure. As concluded by Festinger,

The more active process of communication which goes on within the group, the greater will be the effect of the process of communication in producing uniformity of attitude, opinion and behaviour, and the stronger will be the resulting group standard, as indicated by the degree of uniformity among members of the group and the amount of deviation from the group standards allowed by members (4, p. 175).

The Reliance Dimension

Three aspects of this dimension will be discussed. McCleary found that,

...certain individuals, because of the role they play within their sets of associations, are particularly influential with their associates in helping them make up their minds about problems and issues (13, p. 20).

This agrees with Schermerhorn's model of influence relationships, as well as with the findings of Hollander (8) and Pepitone (17), that members are willing to rely on some members more than others. The willingness of one member to rely on another will depend upon the nature of the relationship, and the perceptions of the member being influenced based upon past experiences. Thus reliance is seen to be an important element in influence relationships.

As the formation of both communication links and reliance links between members depends upon the nature of the relationships between the members concerned, it is reasonable to expect influence by reliance to spread through multi-step channels of relative stability as do communications. Therefore, the first aspect of the reliance dimension is the primary reliance links and the direction of the flow in the links. The second aspect of the reliance dimension is the multi-step reliance channels.

It follows that the greater number of members indicating reliance on member X the greater importance X would have in the influence structure and; in terms of influence, the greater importance to Y if X indicated reliance on Y (2, p. 21).

The third aspect of the reliance dimension is the importance of an individual in the reliance network. This is called the reliance

weight, "which is the number of members in the primary nets of all the members within X's reliance scope" (2, p. 21).

The Attributed Influence Dimension

Studies by Zander et al. (21), Thibaut (20), Hurwitz et al. (10) and Rose (18) indicate that members seek support from and are amenable to suggestions from high status persons. As stated by Blocker et al.,

Our perceptions are not always accurate but we react to them readily; and persons seek support from, imitate, and are receptive to suggestions from high status persons. Therefore, the more members who perceive X to be influential the more important X will be in the influence structure (2, p. 21).

Thus it is important to know the extent to which X is perceived to be influential, and to know which members perceive X to be influential. The first aspect then of the attributed influence dimension is the net of members attributing influence to X, and the second aspect is the attributed influence weight, which is "the sum of those attributing influence to X" (2, p. 22).

II. METHOD OF OBTAINING THE DATA

The two basic methods of obtaining data on inter-personal relationships in a system are by observation, and by soliciting information from members of the system.

The observational method was rejected for three reasons:

1. The study design was to be operational, so that costs must be relatively low, and the functional processes of the school system must not be disrupted by the data collection.

2. When the dispersion of personnel throughout the system was

considered, it appeared doubtful that observations of the necessary personal interactions could be accomplished.

3. Much of the data required for all four sub-problems were concerned with the perceptions of the individual members. It would appear that serious difficulties would attend any attempt to infer a member's perceptions as a result of observing that member's behaviour.

Research has shown that reliable indications of a person's views and perceptions can be solicited from individuals. Menzel and Katz found they could successfully predict the acceptance of new drugs by physicians using information solicited from the physicians (15). Festinger et al stated it was possible, by means of interview, to "reconstruct rather well the major facts about the transmission of rumor" (5, p. 477). McCleary, studying communication structures in a school, used a sociometric questionnaire, and found that "evidence from this investigation indicated that the method identified the person-to-person communication networks with a high degree of accuracy" (13, p. 95). Therefore, for all of these reasons, all data concerning interpersonal relationships was obtained by soliciting information from members of the system.

A questionnaire, (Appendix I) was constructed consisting of three parts. Part one was an instrument designed to gather data on the three dimensions of influence, communications, reliance and attributed influence for each of the twelve task topics. Part one also included for each of the twelve task topics, three sets of Likert-type items designed to reveal clues to the respondent's attitudes

concerning satisfaction or dissatisfaction with the perceived influence structure, satisfaction or dissatisfaction with the perceived direction of influence, and satisfaction or dissatisfaction with his perceptions of his own level of influence.

Part two consisted of an instrument designed to reveal the respondent's social relationships with other members of the organization.

Part three consisted of an instrument designed to reveal clues to conflict relationships which might exist within the organization.

This instrument was submitted to the judgment of a panel of first and second year doctoral students to test the clarity of wording and phrasing in both the instructions and the questions.

A personal interview schedule (Appendix II) was constructed, designed to assist in amplifying, classifying and relating the data collected by means of the questionnaire. Questions were included to solicit additional data relating to respondents' perceptions of the degree to which the members' professional competency was used in organizational decision-making, the degree to which members considered themselves to be influential, the degree to which members desired to be influential, the use of sanctions, the methods of evaluation of performance, supervision practices, and degrees of dependency. This interview schedule was submitted to the judgment of a panel of first and second year doctoral students to test the clarity of wording and phrasing in relation to the data sought.

III. DESIGN FOR SUB-PROBLEM 2.0

Part two of the Questionnaire was designed to collect data on the informal social relationships of each member from which the existence or non-existence of informal social groups could be determined. Part two of the Interview Schedule was designed to provide data revealing the bases for these relationships. The sets of Likert-type items included in part one of the Sociometric Questionnaire were designed to provide data concerning the degree to which the practices of the organization were congruent with the desires of each member. The analysis of the data of Sub-problem 1.0 and Sub-problem 3.0 provided data by means of which the influence elites of the informal social groups could be designated.

IV. DESIGN FOR SUB-PROBLEM 3.0

Parts one, two and three of the Questionnaire were designed to reveal the relationships existing between members of the system. Parts one, two and three of the Interview Schedule were designed to amplify and clarify the relationships revealed in the Questionnaire and to provide data revealing the bases for these relationships.

On the basis of all of the data collected from these sources, by means of the researcher's judgment each relationship reported in the Questionnaire or during the interview was classified according to Schermerhorn's Schema of Modal Influence Relationships. The classification of relationships is discussed in detail in Chapter VII.

V. DESIGN FOR SUB-PROBLEM 4.0

Part four of the Interview Schedule was designed to collect data concerning supervision and evaluation practices. Part five of the Interview Schedule was designed to elicit data on the basis of which the modal sanctions perceived in superordinate-subordinate relations were classified. Part six of the Interview Schedule was designed to collect data on members' perceptions of dependency.

VI. COLLECTION OF THE DATA

Data pertaining to the demographic characteristics of the school district, and the school involved in this study were obtained by consulting a research report completed in September, 1965 (7), by consulting school district records and school records.

Data pertaining to the formal organizational structure of the defined system, including the formal organizational positions held by each member, the formal duties and responsibilities of each member, and the formal role relationships between members were obtained by consulting the Manual of School Law (14), the school district policy and regulation handbook, and by soliciting data from the Superintendent of Schools, the Assistant Superintendent of Schools and the Principal of the school concerned.

Data pertaining to the operational duties and responsibilities of each member, and the operational role relationships between members were obtained by soliciting information from the administrators of the

defined system, and from each member concerned.

Data pertaining to the formal means of decision-making in each of the task topic areas were obtained by soliciting information from the Superintendent of Schools and from the Principal of the school concerned.

Data pertaining to the organization of the school for instruction were obtained from the Principal, the Vice-Principal and each member of the instructional staff of the school.

Administration of the Questionnaire

A List of Personnel was provided with the Questionnaire to each respondent. Each respondent was directed to choose as few or as many names as he felt necessary to reply fully to the questions in the Questionnaire, and to restrict the selection of names to names on the provided List of Personnel. The List of Personnel contained the names, but not the positions, of each member of the defined system, listed alphabetically.

The Questionnaire was administered at the same time to all members of the defined system who were staff members of the school concerned. The researcher was present during this time to answer any questions concerning the clarity or the intent of the wording of the Questionnaire. The Questionnaire was administered individually to those members of the defined system who were not staff members of the school concerned, by the researcher. The time required for the completion of the Questionnaire varied from twenty-five minutes to

one hour and fifteen minutes.

The data contained in each completed Questionnaire was collated for each respondent. The collated data was then used as the basis for making specific the generalized questions contained in Parts one, two and three of the Interview Schedule.

Administration of the Interview Schedule

Each member of the defined system was interviewed by the researcher using the prepared interview schedule. The respondents who were not staff members of the school concerned were interviewed in the privacy of their own offices. Those respondents who were staff members of the school concerned were interviewed within the school in the privacy of an office provided for this purpose by the Principal.

The time required for the completion of the interviews with administrators varied from one hour and ten minutes to two and one half hours. The time required for the completion of the interviews with all other members of the system varied from twenty-five minutes to one hour and fifteen minutes, with the majority requiring about one hour. All interviews were completed within a period of three weeks.

The degree of empathy which the researcher was able to establish between himself and the members during the interviews varied greatly. However, at no time did a lack of empathy prevent the elicitation of at least minimally sufficient data to support the assumption that all data could be treated as being of equal quality for purposes of analysis.

BIBLIOGRAPHY FOR CHAPTER III

- (1) Blocker, C. E., and R. H. McCabe, Relationships Between the Informal Organization and the Curriculum in Six Junior Colleges, (Austin, Texas, 1964).
- (2) Blocker, C. E., R. H. McCabe, and A. J. Prendergast, A Method for the Sociometric Analysis of the Informal Organization Within Large Work Groups, (Austin, Texas, 1964).
- (3) Dahl, R. A., Modern Political Analysis, (Englewood Cliffs, New Jersey, Prentice-Hall Inc., 1964).
- (4) Festinger, L., S. Schacter, and K. Back, Social Pressures in Informal Groups, (New York, The Research Center for Group Dynamics, Institute for Social Research, University of Michigan, Harper and Brothers, 1950).
- (5) Festinger, L., S. Schacter and K. Back, "A Study of a Rumor: Its Origin and Spread," Human Relations, August, 1948, pp. 464-486.
- (6) French, J. R. P., "A Formal Theory of Social Power," Psychological Review, LXIII, May, 1956, pp. 181-193.
- (7) Hardwick, W. G., and R. J. Baker, Regional College Study, (Vancouver, Tantalus Research Limited, 1965).
- (8) Hollander, E. P. "Some Effects of Perceived Status on Responses to Innovative Behaviour," Journal of Abnormal and Social Psychology, LXIII, September, 1961, pp. 247-250.
- (9) Hovland, I. C., E. L. Janis, and H. H. Kelley, Communication and Persuasion, (New Haven, Yale University Press, 1953).
- (10) Hurwitz, J. K., A. F. Zander and B. Hymovitch, Some Effects of Power on the Relations Among Group Members, (Washington, D.C., The National Institute for Mental Health, United States Public Health Service, 1958).
- (11) Katz, E., "The Two-Step Flow of Communication: An Up-to-Date Report on an Hypothesis," Public Opinion Quarterly, XXI, Spring, 1957, pp. 61-78.
- (12) Krugman, H. E., "Affective Response to Music as a Function of Familiarity," Journal of Abnormal and Social Psychology, XXXVIII, July, 1943, pp. 388-392.

- (13) McCleary, L. E., "A Study of Interpersonal Influence Within a School Staff," (unpublished doctoral dissertation), University of Illinois, 1957.
- (14) Manual of School Law and Rules of the Council of Public Instruction, (Victoria, Queen's Printer, Province of British Columbia, 1962).
- (15) Menzel, H. and E. Katz, "Social Relations and Innovation in the Medical Profession," Public Opinion Quarterly, XIX, Winter, 1955-56, pp. 337-352.
- (16) Moreno, J. L., Who Shall Survive, (New York, Beaver House, Inc., 1953).
- (17) Pepitone, A., "Motivational Effects in Social Perception," Human Relations, III, February, 1950, pp. 57-76.
- (18) Rose, A. M., "Rumors in the Stock Market," Public Opinion Quarterly, XV, No. 3, 1951, pp. 461-486.
- (19) Schermerhorn, R. A., Society and Power, (New York, Random House, 1961).
- (20) Thibaut, J. W., "An Experimental Study of the Cohesiveness of Underprivileged Groups," Human Relations, III, February, 1950, pp. 251-278.
- (21) Zander, A., A. R. Cohen, E. Stotland, "Power Relations Among Professions," in D. Cartwright, (ed.) Studies in Social Power, (Ann Arbor, Research Center for Group Dynamics, Institute for Social Research, University of Michigan, 1959), pp. 15-34.

CHAPTER IV

DEFINITION AND DESCRIPTION OF THE SYSTEM

Descriptive Characteristics of the School District

This school district was composed of two separate but adjoining municipalities each of which formed part of a large metropolitan area. There were 717 teaching and administrative staff members serving 18,100 pupils in 27 elementary schools which generally housed grades one to seven, and 9 secondary schools which generally housed grades eight to twelve. For the past ten years there had been a steady annual increase in total enrollment of about seven percent.

In the older southern part of the school district, forty to fifty percent of the fathers had not completed high school (1, p. 25), most were engaged in craft and trade occupations (1, p. 23), with the majority of families reporting an annual income of between \$4,000. and \$8,000. (1, p. 25). In the newer northern part of the school district, most fathers had completed high school plus some specialized training or partial university (1, p. 25), were occupied as sales personnel, managers or professionals in approximately equal percentage (1, p. 23), with the majority of families reporting an annual income of between \$8,000. to \$10,000. (1, p. 25).

Descriptive Characteristics of the School

The secondary school under study was nine years old and was located in the newer northern part of the school district. An

instructional staff of thirty-nine members served an enrollment of 838 students distributed approximately evenly in grades ten, eleven and twelve. Of these students, approximately eighty percent were enrolled in a university entrance program. Virtually all of the remaining twenty percent were enrolled in a commerce vocational program.

Definition of the System Under Study

The system to be studied was defined as including all teachers, supervisors and administrators concerned with the instructional tasks of the school. Defined this way, the system included all members of the instructional staff of the school, plus school district personnel who were not members of the instructional staff of the school, but who interacted directly with members of the instructional staff of the school on instructional matters. Of the personnel falling within this definition (Table III, p. 70), members numbered 1, 2, and 3 were school district administrative personnel, members numbered 6, 7, 8, 9 and 10 were school district personnel who performed in a coordinating capacity in relation to a number of schools, and members numbered 4, 5, and 11 to 46 were members of the instructional staff of the school.

For the purposes of this study, the members of the system were classified under three categories, with members numbered 1 to 5 being classified as administrative personnel, members numbered 6 to 17 being classified as coordinating personnel, and members numbered 18 to 46

TABLE III

PERSONNEL CHARACTERISTICS

IDENTIFICATION	SEX	MARITAL STATUS	AGE	YEARS OF TRAINING	UNIVERSITY DEGREES HELD	YEARS IN THIS SCHOOL*	YEARS IN THIS SCHOOL DISTRICT*	TOTAL YEARS EXPERIENCE*	APPOINTMENT STATUS	SUBJECTS TAUGHT
1	M	M	57	6	B.A., B.PAED.	12	35		Dist. Superintendent of Schools	
2	M	M	52	6	B.A., B.ED.	3	32		Asst. Superintendent of Schools	
3	M	M	62	5	B.A.	36	39		Director of Sec. Instruction	
4	M	M	42	8	M.A., M.ED.	3	5	15	Principal	English
5	M	M	60	6	M.A.	9	20	37	Vice-Principal	Biology
6	M	M	61	5			31	36	Chief Industrial Arts Teacher	
7	M	M	52	6	M.A.		15	30	Science Supervisor	
8	M	M	33	5	B.ED.		6	13	French Supervisor	
9	F	S	59	6	B.A., B.L.S.		15	29	Chief Librarian	
10	M	M	50	5	B.S.A.		9	18	Special Counsellor	
11	M	W	51	6	B.A., B.ED.	9	9	31	Department Head, English	English
12	M	M	56	6	B.A., M.ED.	8	8	19	Dept. Head, Social Studies	Social Studies
13	M	M	46	6	B.ED., M.A.	8	8	15	Dept. Head, Mathematics	Mathematics
14	M	M	29	5	B. SC.	4	4	4	Dept. Head, Science	Physics
15	M	M	55	6	B.A., B.ED.	8	8	32	Dept. Head, French	French
16	M	M	64	5	B.ED.	9	10	32	Dept. Head, Commerce	Commerce
17	M	M	29	6	M.SC.(P.E.)	3	5	5	Dept. Head, Physical Education	Physical Education
18	F	S	58	5	B.A.	9	10	39	Librarian	
19	F	S	37	5	B.A.	1	1	14	Counsellor	Guidance
20	M	M	42	6	B.A., B.ED.	8	17	17	Counsellor	Guidance
21	M	M	47	5	B.A.	4	4	18	Teacher	Commerce
22	F	S	56	5	B.A.	9	11	36	Teacher	Latin, French, Spanish
23	F	S	42	5	B.ED.	2	2	10	Teacher	English, Commerce
24	F	W	52	5	B. H.EC.	3	3	26	Teacher	Home Economics
25	M	S	24	5	B.SC.	1	1	1	Teacher	Science
26	M	M	33	5	B.A.	3	9	10	Teacher	Mathematics
27	M	S	26	5	B.A.	1	1	1	Teacher	English
28	M	M	31	2		1	1	3	Teacher	Industrial Arts
29	M	M	51	6	M.A.	9	9	27	Teacher	French, English
30	M	M	36	5	B.A.	1	1	5	Teacher	Science
31	M	M	38	5	B.ED.	2	3	18	Teacher	English, Fine Arts
32	F	S	49	5	B.ED.	5	7	27	Teacher	Mathematics
33	M	M	39	6	B.A., B.ED.	3	5	16	Teacher	Social Studies
34	M	M	34	5		1	10	12	Teacher	Industrial Arts
35	F	M	30	5	B.ED.	1	1	8	Teacher	Science
36	F	S	30	5	B.P.E.	4	4	6	Teacher	Phys.Ed., Eng., Soc.St.
37	M	M	37	5	B.SC.(P.E.)	9	9	13	Teacher	Phys.Ed., Soc.St.
38	M	S	37	5	B.A.	8	8	10	Teacher	Social Studies
39	M	M	37	6	B.A., M.ED.	8	10	14	Teacher	English
40	F	S	42	5	B.ED.	5	5	17	Teacher	Mathematics
41	F	M	24	6	M.ED.	1	1	4	Teacher	Physical Education
42	M	M	28	5	B.ED.	3	3	7	Teacher	English
43	F	M	42	6	B.A., B.H.EC.	1	1	13	Teacher	Science, Home Ec.
44	M	S	50	5	B.A.	3	3	10	Teacher	Social Studies
45	M	M	45	5	B.A.	2	3	15	Teacher	English
46	F	S	28	5	B.A.	2	2	6	Teacher	French, English

M = 33

F = 13

N = 46

Mean Age = 41 years

Mean years of training = 5.33 years

Mean years of experience in this school = 4.5 years

Mean years of experience in this school district = 7.6 years

Mean of the total years of experience = 17.9 years

* INCLUDES THE PRESENT SCHOOL YEAR.

being classified as teachers.

Personnel Characteristics

The data summarized in Table III (p. 70) reveals the professional qualifications held by the members of this system. The average number of years of professional training was 5.33. All but the three members concerned with Industrial Arts had at least one university degree, while nine members had Master's degrees. In terms of training, the Principal was the most highly qualified member with two Master's degrees.

The average years of teaching experience was 17.9. Member 3, the Director, and member 18, the Librarian, had the greatest number of years of experience, closely followed by member 5, the Vice-Principal. Member 4, the Principal, had slightly less than the average number of years of experience. Two members of the school staff were in their first year of experience as teachers.

The average number of years of experience within this school district was 7.6. Member 3, the Director had the greatest number of years of experience in this school district, followed by member 6, the Chief Industrial Arts Teacher and member 5, the Vice-Principal. Member 4, the Principal, had less than the average number of years of experience in this school district, but had more than member 2, the Assistant Superintendent. Eight members of the instructional staff of the school were in their first year of teaching in this school district.

The average number of years of experience within this school was 4.5. Member 4, the Principal, was in his third year in this school. Seven members of the school staff, including member 5, the Vice-Principal, had been in this school since it opened. Of the seven Department Heads, two had been in the school since it opened, while three joined the school in its second year of operation. Nine teachers were in their first year as members of this staff.

Description of the Formal Positions in the System

The District Superintendent and Assistant Superintendent. The District Superintendent of Schools and the Assistant Superintendent of Schools each held dual positions. First, both were civil servants, employees of the Provincial Department of Education. They were selected for these positions by the Board of this school district from a limited number of possible selectees designated by the Provincial Department. They were appointed to their positions in this district by the Provincial Department, and they were directly responsible to the Provincial Department for the quality of education offered in this school district as set out in the Public Schools Act (2, Secs. 9 (1), (2), 13, 128, 131, 152 (a)). Second, they were employees of the Board of the School District. The Superintendent was appointed by the Board as Chief Executive Officer of the Board, while the Assistant Superintendent was appointed by the Board as an executive officer and member of the Administrative Committee of the Board. In these capacities, both were responsible to the Board. Their salaries as

civil servants were determined and paid by the Provincial Department, but both received extra remuneration from the Board, the amount approved by the Provincial Department, for their executive services to the Board. For reasons of dissatisfaction with their performance, the Board could at any time rescind their appointments as executive officers of the Board. They could be removed from their positions as Superintendent and Assistant Superintendent only by the Provincial Department. One case is on record of a Board in this metropolitan area requesting the removal of a Superintendent. In this case, the Provincial Department did not accede to this request.

The Superintendent was concerned with administrative duties pertaining to the school district as a whole, the administration of the Public Schools Act, the development of Board policy and regulation, finance, the overall development of educational facilities and programs, and the coordination of the activities of all other employees of the Board. Responsibility for most instructional and administrative matters pertaining directly to the operation of the schools had been delegated to the Assistant Superintendent.

By Board Regulation 2120, in addition to assisting the Superintendent generally, the Assistant Superintendent was directly responsible for:

1. The organization, administration, and supervision of all schools and their administrative and teaching personnel;
2. The organization and direction of the work of the Directors of Instruction, the Consultants and Supervisors of Instruction, the Special Counsellors, the Chief Librarian and the Chief Industrial Arts Teacher;

3. The direction and general supervision of the total public relations programme in the School District.

All other members of the system were employees of the Board, and were selected and appointed by the Board, according to provisions in the Public Schools Act (2, Sec. 128-135), after receiving advice from the Administrative Committee of the Board. For reasons of dissatisfaction with their performance, these members could be transferred to other positions in the district, or have their employment in the district terminated by the Board, according to provisions of the Public Schools Act, with the approval of the Superintendent. These members' salaries were paid by the Board and were determined by negotiation. The Director of Secondary Instruction negotiated directly with the Superintendent and the Board. The salaries of the Principal and Vice-Principal were determined according to a salary schedule negotiated between the Board and a committee of the Principals' and Vice-Principals' Section of the local teachers' association. The salaries of all other members of the system were determined according to a salary schedule negotiated between the Board and a committee of the local teachers' association.

The Director of Secondary Instruction. According to Board Regulation 2130 (3), the Director of Secondary Instruction was required to:

1. Supervise, coordinate, and endeavour to improve standards of instruction in cooperation with principals of schools;
2. Inspect the learning situations in classrooms and issue written reports on them;

3. Assist in the selection, assignment and transfer of teachers;
4. Act as a member of the Administrative Committee of the School Board;
5. Act as assigned by the District Superintendent of Schools as Chairman or member of special or standing committees.

According to the Rules of the Council of Public Instruction (2, Sec. 11.10) the Director "...may advise a principal, but shall not himself issue directives to him nor to his teachers, nor otherwise encroach on the principal's responsibility...."

Although he assisted in the selection and placement of teachers, and functioned to a limited extent in the coordination and conduct of in-service training programmes for teachers of secondary grades, the Director felt his prime function was to inspect and report on the performance of teachers. He functioned primarily in a regulatory capacity as an inspector rather than in a role of developing improvements in curriculum, organization or teaching methodology. He inspected and wrote reports on all teachers in their first probationary year in the school district, and on other teachers occasionally. The Director had held this position in this school district for a period of ten years.

The Principal. The Principal was directly responsible to the Assistant Superintendent for the complete organization, administration and supervision of the instructional programme and of all personnel functioning within his school. He was required to submit a written report on the performance of each member of the school staff annually. The Principal reported that his prime function was to provide excellent

instruction for the pupils in his school. Although he maintained control over the development of all policy for the school organization, he devoted a major portion of his time and energy to the visitation of teachers, and to the professional development of teachers by encouraging and fostering innovations in organizing for instruction and in teaching methodology. The Principal taught English Literature to one class of senior students.

The Vice-Principal. The Vice-Principal was directly responsible to the Principal for the day-to-day administration of the school, the initial stages of student discipline, the provision of all supplies and equipment for the school, the maintenance of the school building and equipment, and the general supervision of the school office staff. He was responsible for, and worked closely with the Student Council in regard to extra-curricular activities. He shared responsibility with the Principal for the supervision of the instruction given by members of the Mathematics and Science Departments. He taught Biology to one class of senior students.

The Chief Industrial Arts Teacher. The Chief Industrial Arts Teacher taught Industrial Arts half-time in another secondary school in the district, and devoted the other half of his time to his duties related to the district as a whole. He reported that he functioned primarily as an advisor to the Administrative Committee of the Board on the selection and purchase of supplies and equipment for Industrial Arts instruction. According to Board policy he could not inspect Industrial Arts teachers, nor make any report on the performance of

these teachers. He had functioned in this position for a period of ten years.

French and Science Supervisors. The French and Science Supervisors taught half-time in secondary schools within the district, and devoted the other half of their time to their duties related to the district as a whole. They were charged with improving instruction in their subject fields by sponsoring in-service training programmes, and by acting as consultants to Department Heads and teachers when asked to do so by the Department Head or teacher concerned. According to Board policy they could not inspect teachers, nor make any report on the performance of teachers. They acted as advisors to the Administrative Committee of the Board on the selection and purchase of supplies and equipment for instruction. Both supervisors reported that during the past year they had been engaged primarily in assisting teachers of grades eight and nine. The French Supervisor was in his second year in this position, while the Science Supervisor was in his first year in this position.

Chief Librarian. The Chief Librarian functioned at the Board offices and acted as librarian for the Teachers' Professional Library which was located there. She was responsible for coordinating the purchase and repair of all books, and the cataloguing of all books for all school libraries in the district.

Special Counsellor. The Special Counsellor had an office located in the Board offices, and served approximately half of the elementary and secondary schools in the district. According to Board

Regulation 2130 (7), he was required to:

1. Work with special behaviour and learning problems referred to him by the principals of the elementary schools.
2. Counsel teachers on mental health problems of pupils.
3. Visit in homes, conferring with parents.
4. Act on a consultative basis with Counsellors in secondary schools, and work with special mental health problems of students when requested by the Counsellor and Principal.
5. Investigate any special problem at the request of the Superintendent of Schools or Assistant Superintendent of Schools.
6. Assist in the screening of referrals for occupational, remedial, slow learner, and other special cases.
7. Participate in all mental health clinic conferences concerning school pupils.
8. Act as liaison between schools and social agencies in the community.

The Special Counsellor reported that the majority of his time was spent on problems arising in the elementary schools and that his services were rarely requested by members of the school under study. He was formerly a counsellor in the school under study, and had held his present position for a period of three years.

Department Heads. Department Heads were selected by the Principal, approved by the Superintendent, and appointed by the Board for periods of one year. To maintain this position, a Department Head had to be reappointed each year. According to Board Regulation 2230, a Department Head was required:

1. To teach well his subject.
2. To advise and assist teachers towards the improvement of the

quality of instruction by:

- a) Arranging in consultation with the Principal, meetings of teachers of his subject at all grade levels to discuss courses, limits, and previews, and to exchange ideas on teaching problems.
 - b) Advising and assisting teachers on the organization, preparation, and presentation of their classroom work.
 - c) Conducting classroom demonstrations for the benefit of other teachers in the department.
 - d) Orienting new teachers and substitute teachers.
 - e) Coordinating the work of teachers in setting and marking school examinations.
3. To assist the Principal in duties relating to subject fields by:
- a) Taking responsibility for the inventory, distribution and care of equipment and supplies.
 - b) Coordinating some of the mimeographing needs of the department.
 - c) Assuming such other duties as may be assigned by the Principal.
4. To make a written report to the Principal with a copy to the District Superintendent of Schools at the end of each school year listing steps used during the year to improve the work of the department and making practical suggestions for future improvements.

All Department Heads reported that although suggestions were often made to teachers during subject department meetings, and that the Department Heads were always available for consultation, the duties listed under a), b), c) and d) of 2. above were carried out only at the request of teachers, and that these requests were rarely made. The agendas of department meetings were largely concerned with the duties listed under the remainder of the sections above. All

Department Heads reported that they did not see themselves, and did not wish to be considered as administrative personnel. Department Heads could visit a teacher during periods of instruction only if requested to do so by the teacher. The French Department Head refused to observe the teaching of member 29, when requested to do so by member 29, stating that he did not think it was proper for a Department Head to observe the teaching of a member of his department. According to Board policy Department Heads could not report on the performance of a teacher. Only the Science and Physical Education Department Heads were initially selected by the present Principal. All other Department Heads were functioning in this capacity prior to the appointment of the present Principal.

Teachers. Teachers were assigned to schools by the Assistant Superintendent, and assigned to specific teaching duties by the Principal. During the first year of employment in the school district teachers were on probation, and at the end of that year could have their employment terminated by the Board without the right of appeal. After the probationary year, teachers became permanent staff members of the school district, and any termination of employment was subject to appeal (2, Sec. 128-135). Teachers could be transferred at any time from one school to another within the district by the Superintendent with the approval of the Board (2, Sec. 128-135). With the exception of the Superintendent and Assistant Superintendent, all members of the system defined for this study had the legal status of teachers in addition to the status of any other position they held.

Organization of the School

The curriculum, in general terms, was prescribed by the Provincial Department of Education, which clearly set out the courses which may be offered, and the text books which could be used in each course. Some latitude in the selection of courses to be offered was allowed, particularly in programs other than the university entrance program. Departmental approval for the offering of optional courses was dependent upon the qualifications of the members of the staff, and the facilities available in the school. University entrance programs were rather narrowly prescribed, with latitude allowed in the offering of extra foreign languages such as Latin, German and Spanish, and in the offering of courses in the Fine Arts.

The basic outline and minimum content to be covered in each course was prescribed by the Provincial Department. Because of terminal examinations set by the Provincial Department for all students on the university entrance program at the completion of grade twelve, little latitude was allowed in the selection of the basic content for these courses. There was some latitude allowed in the selection of readings for English Literature courses. As terminal examinations are not set by the Provincial Department for students in programs other than the university entrance program, the teachers of these courses reported they enjoyed much more latitude in developing the courses according to their professional judgment of the needs and abilities of the students. However, all teachers were expected to use their professional judgment in the planning and development of each

course, in the selection of exercises and research materials, and in enriching the courses beyond the basic minimum content required by the Provincial Department.

The school was organized on a five period day, seven day cycle, with each period lasting one hour. Bells were not used to signal the beginning and ending of periods to allow for a variation in this general organization. The variation was introduced during the past two years and was participated in by some members of the English and Social Studies Departments. This variation was a library centred research approach to the study of English and Social Studies by students in the senior grades. Half-hour modules were used to gain flexibility, to allow half a class of students to do directed research in the library while the other half of the class remained with the teacher in a seminar situation. At times, two classes were grouped for instruction, and at times one class would be involved in the study of one subject for the length of one and one-half or two normal periods. These flexible arrangements were made informally by the individual teachers concerned.

All teachers had one period free of teaching each day. However during one or two of these unassigned periods per week, teachers were required to supervise students studying independently in study halls. All teachers and Department Heads were assigned home room duties with the exception of the librarian, the counsellors, the full time Home Economics teacher, the two Industrial Arts teachers, the Physical Education Department Head and the two senior Physical Education

teachers.

The general supervision of students in and around the school during the periods just prior to the beginning of classes in the morning, during noon hour, and just after dismissal in the afternoon was shared by all teachers and Department Heads according to a supervision schedule.

Staff meetings, subject department meetings and other committee meetings involving the instructional staff were held after instructional hours. All members of the instructional staff were encouraged, but not required, to sponsor and take part in extra-curricular activities with students.

The counsellors taught all guidance courses offered in the school, and were responsible for all progress records of students. All normal contact between the school and parents, whether initiated by a school staff member or a parent, was channelled initially through the counsellors. In problems deemed to be serious, the Vice-Principal or the Principal discussed the problems with parents. Teachers rarely contacted or met with parents, but were informed of communications between the school and parents if the communication concerned the teacher's relationship with a student.

There was no Parent-Teacher or Home and School organization related to the school. However, the Principal held periodic open meetings with parents to discuss grading and promotional practices, and problems related to the selection of programs by students.

Description of the Formal Means of Decision Making

Information concerning the formal means of decision making within the school was solicited from the Principal, the Vice-Principal, and Department Heads, and spot checked with certain teachers. Information concerning communication between the school and the Board office relating to the making of decisions affecting the operation of the school was solicited from all those members of the system classified as administrative and coordinating personnel.

The Department Heads acted as a cabinet, in an advisory capacity, to the Principal. Department Heads' meetings were held regularly every two weeks with the Principal acting as Chairman and in control of the agenda. The meetings were used as means for the mutual sharing of information, to provide feedback to the Principal on the operation of the school, for the recognition of problems, the suggestion and discussion of possible solutions, and for the Principal to reveal his desires to the Department Heads. Issues could be raised, and discussion initiated by any member of the meeting but the length and the direction of discussion were controlled by the Principal. The meetings were also used as a means of reaching decisions, with the Principal making the decisions, but always after an attempt to achieve consensus.

Staff meetings of all members of the instructional staff of the school were held regularly each month with the Principal acting as chairman and in control of the agenda. The meetings were used as means for the Principal to reveal his desires to the staff as a whole, and

to present problems of general concern to the whole staff. The meetings were also used to present tentative solutions for discussion, or to present decisions made by the Principal, in an attempt to achieve a consensus of agreement. Issues could be raised and discussion initiated by any member of the meeting. Decisions on most issues raised at these meetings were made at Department Heads' meetings or by the Principal without consultation with the Department Heads, and reported back to a subsequent staff meeting.

Subject matter department meetings were called irregularly, and chaired by Department Heads with the agenda controlled by the chairman. These meetings were used by the Department Heads to disperse information, to solicit information to be shared by all members of the department relating to the teaching of the specific subject, and to inform members of the department of decisions reached at Heads of Department meetings. Issues could be raised and discussion initiated by any member of the meeting. These meetings were also used as a means of reaching decisions concerning the selection of the content to be taught in each course as required for the definition and coordination of courses within programs, and for the common examination of students within courses. Department Heads used these meetings for the discussion and formulation of departmental requests for the provision of facilities, equipment and supplies for instruction.

A General Policy Booklet containing the policies governing the operation of this school, and pertinent Board policy, was prepared by

the Principal, revised and issued annually to all members of the instructional staff.

Task Topic 1, Scheduling. The initial planning relating to the selection of courses to be offered, the distribution of instructional time, and the time-table scheduling of teachers and pupils was completed by the Principal. These plans were discussed and clarified at meetings of Department Heads, presented at Staff Meetings as information, and for discussion, and adopted at a meeting of Department Heads. The actual construction of the time-table was carried out by a Time-Table Committee chaired by the Vice-Principal and consisting of the two counsellors, members 19 and 20, and two teachers. At the time of the study, teachers 26 and 42 served on the Time-Table Committee.

Task Topic 2, Instructional Facilities. The school district budget for capital expenditures and supplies was set annually by the Superintendent in consultation with the members of the Administrative Committee of the Board, and then approved by the Board. Requisitions from the school to the Board for capital expenditures on facilities and equipment, and for instructional supplies, were made annually. Requisitions for the maintenance of facilities or equipment were made as the need arose by the Vice-Principal.

Catalogues listing the instructional supplies which could be requisitioned, and the quotas for each type of supply, were prepared each year by the Assistant Superintendent assisted by senior teachers of the district. These catalogues were distributed by the Vice-

Principal to the Department Heads. The Department Heads completed requests for supplies in consultation with the members of the department. The requests for supplies from all Department Heads were collated by the Vice-Principal, who submitted requisitions for instructional supplies, office supplies, and general paper supplies to the Assistant Superintendent. The librarian requested advice from all teachers and Department Heads concerning the ordering of library materials, then submitted the completed requisition to the Chief Librarian. The Assistant Superintendent, in consultation with the Chief Librarian, Chief Industrial Arts Teacher, and the French and Science Supervisors approved all requisitions for supplies.

Annual requests for new equipment, or the improvement of facilities were made to the Vice-Principal by the Department Heads after consultation with the members of the departments. The Vice-Principal collated these requests, and submitted requisitions to the Assistant Superintendent, who approved the requisitions in consultation with the Chief Librarian, the Chief Industrial Arts Teacher, and the French and Science Supervisors. Prior to approval, capital expenditure requisitions were usually discussed by the Assistant Superintendent with the Principal and Vice-Principal.

Task Topic 3, Teaching Assignments. Each teacher had the opportunity to express his preferences for teaching assignments to the Principal. The allocation of teaching assignments was made by the Principal after consultation with the Department Heads.

Task Topic 4, Course Content. To the extent that it was required to define and coordinate each course within a program, and for the purpose of the common examination of students, the selection of the content to be taught in each course was determined by consensus in subject department meetings. Other than these requirements, and the requirements of the provincial curriculum, the content in each course was selected by the teacher teaching that course.

Task Topic 5, Teaching Methodology. Information was given, and suggestions made at Staff Meetings and Subject Department Meetings, but the methodology of instruction to be used in each course was selected by the teacher teaching that course.

Task Topic 6, Classroom Organization. Within the restrictions imposed by the facilities available, each teacher was free to select and use the desired form of classroom organization for instruction.

Task Topic 7, Student Evaluation. Policies and regulations governing student evaluation practices were formulated in Heads of Department's meetings, presented at Staff Meetings for discussion, adopted at Heads of Department's meetings, and conveyed to teachers through school policy circulars and Subject Department Meetings.

Task Topic 8, Grading and Promotion. Policies and regulations concerning student grading and promotional practices were formulated, decided and conveyed to teachers in the manner described above for Task Topic 7.

Task Topic 9, Student Discipline. Policies and regulations in regard to student discipline practices were formulated by the Principal,

and set down in the General Policy Booklet. These policies and regulations were at times discussed and clarified at Staff Meetings.

Task Topic 10, Student Accounting. Student accounting practices were determined by the Vice-Principal in consultation with the two counsellors, and presented at Staff Meetings for discussion and clarification.

Task Topic 11, Extra-curricular Activities. Policies and regulations concerning extra-curricular activities were determined by the Principal and set down in the General Policy Booklet. Extra-curricular activities which could affect the operation of the school generally were discussed at Staff Meetings, however, most discussion of extra-curricular activities occurred between the Principal or Vice-Principal and the staff members concerned.

Task Topic 12, Parent Relationships. Policies and procedures concerning relationships with parents were determined by the Principal, set down in the General Policy Booklet, and clarified through discussion at Staff Meetings.

BIBLIOGRAPHY FOR CHAPTER IV

- (1) Hardwick, W. G. and R. J. Baker, Regional College Study,
(Vancouver, Tantulus Research Limited, 1965).
- (2) Manual of School Law and Rules of the Council of Public Instruction,
(Victoria, Queen's Printer, Province of British Columbia, 1962).

CHAPTER V

ANALYSIS OF THE DATA: SUB-PROBLEM 1.0

Sub-problem 1.0 was stated in the form of the question:

What is the nature of the influence structures existing within the organization?

The analysis of the data concerning this sub-problem, and concerning the seven hypotheses related to this sub-problem will be reported in this chapter. The analysis of the data concerning the three dimensions, communications, reliance, and attributed influence is similar to that developed at the University of Texas and reported by Blocker et al. (2). However, in this study, matrices were constructed and weights were calculated for each dimension on each of the twelve Task Topics.

Communications Dimension

The respondents to the questionnaires included all members of the system. Each respondent was offered a complete list of all members of the system from which to make selections of members with whom they had communicated. The number of choices was not limited.

In order to eliminate choices which may have been incorrect or which may have been made carelessly, choices which were not reciprocated were not considered. The reciprocated choices were considered to be validated, that is, they were considered to be indications of communications which actually existed. It was recognized that the use of this method

of verification might result in the loss of some valid data, as it may not be assumed that all unreciprocated choices would necessarily be invalid. However the verification of communication links was considered to be more important than the loss of valid data which might occur. Moreno (7), Jennings (6), and Bronfenbrenner (3) support the use of reciprocated choices, indicating their use adds validity to sociometric data.

The reciprocated choices were recorded in a matrix, in which each member was represented by a row and a column. The choices made by member X and reciprocated appeared in row X, while the choices made to member X and reciprocated by him appeared in column X. Because only reciprocated choices were recorded, this matrix was symmetrical. An examination of the matrix revealed all of the primary reciprocated communication links in the system. The figures appearing in each column were summed revealing the number of members within the primary communications net of each member.

The two and three step channels of communication were developed by squaring and cubing the reciprocated matrix, using standard operations of matrix algebra. The squaring of the matrix was accomplished by multiplying the reciprocated matrix by itself. An examination of the squared matrix revealed all of the two-step reciprocated communication links in the system. The cubed matrix was obtained by multiplying the squared matrix by the original reciprocated matrix. The values which appeared in the cells of the cubed matrix indicated the number of three-step communication links which

existed between any two members.

The communications weights of each member were computed by summing the values in the columns of the cubed reciprocated communications matrix. The values attained indicated the relative importance of each member in the communications dimension. On the basis of this, the members were ranked according to the weights attained.

The Reliance Dimension

Two basic differences exist between the data for the communication dimension, and the data for the reliance dimension, which affected the development of reliance weights. In the communication dimension, the data concerned communication links through which information could flow in either direction, and the data represented communications links which have existed, and could therefore be verified through the reciprocated choice method. The reliance data represented members' perceptions of whom they would rely on, and there appeared to be no way to verify the members' perceptions of their future actions. Therefore no attempt was made to verify this data in the manipulation of the data. However, the accuracy of each respondent in completing the questionnaire according to his intentions was verified during the personal interview between the researcher and each member. Logically, reliance links may or may not be reciprocal, hence reliance links were considered to be uni-directional. The choices were recorded in a matrix in which each member was represented by a row and a column. An examination of this matrix revealed all of

the primary reliance links in the system, and the direction of these links. The column sums revealed the number of members within the primary reliance scope of each member, and the row sums indicated the number of members on which each of the members would rely.

The two and three step channels of reliance were developed by squaring and cubing the original matrix. Those members who would rely on X appeared in the original matrix. Those members who would rely on those who would rely on X appeared in the squared matrix. Those members who would rely on those who appeared in the squared matrix appeared in the cubed matrix. The sum of a column in the cubed matrix revealed the total number of three-step reliance links through which members relied on the member designated by that column.

In assigning reliance weights to members, the most important consideration was the relative reliance value of those members who would rely on the member being considered. That is, if member X was relied on by only one member, but that member was a highly influential member, then in terms of reliance, member X should rank high. Therefore a reliance subweight was assigned to each member.

The sub-weight for X was equal to the number of members who relied directly on X (primary reliance scope) plus one: the one was added as a value for X himself. The subweights of all of the persons in the tertiary reliance net of each member were then summed; this was the reliance weight of the members.

The computation of the weights was done by first summing the columns of the original reliance matrix and adding 1 to each column total: the results were the subweights. The subweight of member X was then substituted in row X of the cubed reliance matrix wherever any value appeared. When this had been done for all members, the columns of the cubed reliance matrix were summed. The column sums were the reliance weights. (2, p. 30)

After inspection of the reliance weights, a problem was recognized and a correction to the calculation of the reliance weights was carried out following the suggestion of Blocker and McCabe.

The weighting system needed some adjustment. The system did distinguish those persons who were influential because of a reliance link with a few influentials. However, the system tended to place the most influential member below those on whom he relied. This was due to the subweight substitution method, which is still considered to be basically sound by the author. The problem can be solved by adding each member's own subweight to his total. This would have the effect of allowing a bonus for primary links, while not losing the advantage of pointing out those persons with a few reliance links. (1, p. 107)

Inspection of the corrected reliance weights revealed that the problem recognized above was overcome satisfactorily. The method of calculating the reliance weights including the corrective procedure, was considered to be basically sound. The members were ranked according to the weights attained.

Attributed Influence Dimension

The choices were recorded in a matrix in which each member was represented by a row and a column. An examination of the matrix revealed the members who had attributed influence to each of the other members of the system. Since no direct relationship was implied, these data could not be expanded as were the data of the other dimensions. The attributed influence weight was computed by summing the columns of the original attributed influence matrix. The members were ranked according to the weights attained.

The Quantification of Relative Amounts of Influence

Members may be ranked according to the weights calculated on each of the three dimensions. Since no valid argument may be advanced to suggest a mathematical relationship between the weights calculated for each member on each dimension, it did not seem logical to accumulate weights or ranks across all three dimensions. However, reason suggests that in relation to other members, influential members should rank highly on each dimension. It was therefore stipulated that persons to be designated as being highly influential, would rank in the upper quartile of each dimension. In classifying members as being influential, members in the upper quartile were considered to be those members ranking from one to eleven.

Communication, Reliance, and Attributed Influence on Each Task Topic

Task Topic 1, Scheduling. As revealed in Table IV (p. 97), those members classified as influentials on Task Topic 1 were members numbered 4, 5, 11, 13, 14, 19 and 20. On this topic, the influence seemed to be centred in the Principal, the Vice-Principal, the Department Heads, three of whom were classified as influentials with the remaining four ranking relatively high, and the two counsellors. It is interesting to note that two members of the time-table committee, members 26 and 42, did not rank highly, while the three remaining members were classified as influentials. Perhaps this can be explained by the fact that the Vice-Principal and the two counsellors were continuing members of this committee from year to year, while the

TABLE IV
COMMUNICATION, RELIANCE AND ATTRIBUTED INFLUENCE WEIGHTS
AND
RANKS FOR TASK TOPICS 1, 2 AND 3.

TASK TOPIC 1									TASK TOPIC 2									TASK TOPIC 3								
Scheduling									Instructional Facilities									Teaching Assignment								
Dimension 1			Dimension 2			Dimension 3			Dimension 1			Dimension 2			Dimension 3			Dimension 1			Dimension 2			Dimension 3		
Communi- cations			Reliance			Attributed Influence			Communi- cations			Reliance			Attributed Influence			Communi- cations			Reliance			Attributed Influence		
M	W	R	M	W	R	M	W	R	M	W	R	M	W	R	M	W	R	M	W	R	M	W	R	M	W	R
E	E	A	E	E	A	E	E	A	E	E	A	E	E	A	E	E	A	E	E	A	E	E	A	E	E	A
M	I	N	M	I	N	M	I	N	M	I	N	M	I	N	M	I	N	M	I	N	M	I	N	M	I	N
B	O	K	B	O	K	B	O	K	B	O	K	B	O	K	B	O	K	B	O	K	B	O	K	B	O	K
E	H		E	H		E	H		E	H		E	H		E	H		E	H		E	H		E	H	
R	T		R	T		R	T		R	T		R	T		R	T		R	T		R	T		R	T	
4	60	1	4	158	1	4	39	1	5	296	1	5	231	1	4	38	1	4	86	1	4	117	1	4	41	1
5	30	2.5	19	133	2.5	5	14	2	4	157	2	4	224	2	5	34	2	17	19	2	5	93	2	2	9	2.5
19	30	2.5	20	133	2.5	20	13	3	11	134	3	7	185	3	1	15	3	1	16	3	11	65	3	5	9	2.5
20	24	4	5	131	4	1	12	4.5	13	117	4.5	2	168	4	2	12	4	13	15	4	12	63	6	11	8	4.5
13	14	5	13	130	6	19	12	4.5	17	117	4.5	1	167	5.5	18	11	5	2	13	8	13	63	6	16	8	4.5
11	12	7.5	14	130	6	16	11	6	14	102	6	6	167	5.5	14	9	6	5	13	8	15	63	6	17	6	6
12	12	7.5	16	130	6	2	10	7	36	81	7	9	140	7	15	8	7	11	13	8	16	63	6	1	5	9
14	12	7.5	11	129	8	11	9	8.5	43	70	8	18	113	8	17	7	8	12	13	8	17	63	6	12	5	9
15	12	7.5	15	128	9	13	9	8.5	15	69	9	14	112	9	6	6	11.5	14	13	8	14	62	9	13	5	9
40	8	10	41	123	10	12	8	10.5	19	61	11.5	16	108	10	11	6	11.5	15	13	8	26	59	12	14	5	9
17	4	11	26	121	11	14	8	10.5	20	61	11.5	8	107	11	13	6	11.5	16	13	8	32	59	12	15	5	9
37	2	12.5	32	120	12.5	15	7	12.5	28	61	11.5	3	93	12	16	6	11.5	36	11	12.5	39	59	12	3	3	12
41	2	12.5	40	120	12.5	17	7	12.5	34	61	11.5	25	85	14	7	5	13.5	41	11	12.5	40	59	12	33	2	14
1	1	14.5	12	86	14	34	2	13	18	59	14	30	85	14	8	5	13.5	26	10	14	45	59	12	41	2	14
2	1	14.5	17	62	15	6	1	17	1	53	15	35	85	14	12	4	15	3	3	15	2	10	15	44	2	14
3	0	31	37	14	16	28	1	17	26	51	17	15	74	16	3	3	18	33	1	16.5	1	6	17	6	1	18.5
6	0	31	2	11	17.5	29	1	17	32	51	17	21	52	17	9	3	18	44	1	16.5	3	6	17	18	1	18.5
7	0	31	3	11	17.5	33	1	17	40	51	17	13	50	18.5	20	3	18	6	0	32	6	6	17	23	1	18.5
8	0	31	1	7	20.5	38	1	17	41	46	19	17	50	18.5	39	3	18	7	0	32	23	2	19.5	29	1	18.5
9	0	31	6	7	20.5	3	0	33	12	45	21	11	44	20	44	3	18	8	0	32	33	2	19.5	38	1	18.5
10	0	31	7	7	20.5	7	0	33	16	45	21	12	43	21	19	2	28	9	0	32	7	1	33.5	45	1	18.5
16	0	31	8	7	20.5	8	0	33	24	45	21	22	41	22	26	2	28	10	0	32	8	1	33.5	7	0	34
18	0	31	18	2	23	9	0	33	25	43	23	37	35	23.5	27	2	28	18	0	32	9	1	33.5	8	0	34
21	0	31	9	1	35	10	0	33	31	40	24.5	41	35	23.5	28	2	28	19	0	32	10	1	33.5	9	0	34
22	0	31	10	1	35	18	0	33	42	40	24.5	26	33	26	29	2	28	20	0	32	18	1	33.5	10	0	34
23	0	31	21	1	35	21	0	33	7	35	27	32	33	26	33	2	28	21	0	32	19	1	33.5	19	0	34
24	0	31	22	1	35	22	0	33	30	35	27	40	33	26	34	2	28	22	0	32	20	1	33.5	20	0	34
25	0	31	23	1	35	23	0	33	35	35	27	39	30	28	35	2	28	23	0	32	21	1	33.5	21	0	34
26	0	31	24	1	35	24	0	33	22	32	29	28	4	30.5	36	2	28	24	0	32	22	1	33.5	22	0	34
27	0	31	25	1	35	25	0	33	27	31	30.5	33	4	30.5	37	2	28	25	0	32	24	1	33.5	24	0	34
28	0	31	27	1	35	26	0	33	45	31	30.5	34	4	30.5	38	2	28	27	0	32	25	1	33.5	25	0	34
29	0	31	28	1	35	27	0	33	8	28	32.5	44	4	30.5	41	2	28	28	0	32	27	1	33.5	26	0	34
30	0	31	29	1	35	30	0	33	37	28	32.5	20	2	34	42	2	28	29	0	32	28	1	33.5	27	0	34
31	0	31	30	1	35	31	0	33	9	27	34	29	2	34	45	2	28	30	0	32	29	1	33.5	28	0	34
32	0	31	31	1	35	32	0	33	29	23	35	45	2	34	46	2	28	31	0	32	30	1	33.5	30	0	34
33	0	31	33	1	35	35	0	33	33	20	36.5	10	1	41	21	1	40.5	32	0	32	31	1	33.5	31	0	34
34	0	31	34	1	35	36	0	33	39	20	36.5	19	1	41	22	1	40.5	34	0	32	34	1	33.5	32	0	34
35	0	31	35	1	35	37	0	33	46	14	38	23	1	41	23	1	40.5	35	0	32	35	1	33.5	34	0	34
36	0	31	36	1	35	39	0	33	2	13	39	24	1	41	24	1	40.5	37	0	32	36	1	33.5	35	0	34
38	0	31	38	1	35	40	0	33	3	7	40	27	1	41	25	1	40.5	38	0	32	37	1	33.5	36	0	34
39	0	31	39	1	35	41	0	33	38	6	41.5	31	1	41	30	1	40.5	39	0	32	38	1	33.5	37	0	34
42	0	31	42	1	35	42	0	33	44	6	41.5	36	1	41	31	1	40.5	40	0	32	41	1	33.5	39	0	34
43	0	31	43	1	35	43	0	33	6	3	43	38	1	41	32	1	40.5	42	0	32	42	1	33.5	40	0	34
44	0	31	44	1	35	44	0	33	21	1	44.5	42	1	41	40	1	40.5	43	0	32	43	1	33.5	42	0	34
45	0	31	45	1	35	45	0	33	23	1	44.5	43	1	41	43	1	40.5	44	0	32	44	1	33.5	43	0	34
46	0	31	46	1	35	46	0	33	10	0	46	46	1	41	10	0	46	46	0	32	46	1	33.5	46	0	34

Members classified as influentials on
Task Topic 1: 4, 5, 11, 13, 14, 19, 20.

Members classified as influentials on
Task Topic 2: 4, 5 and 14.

Members classified as influentials on
Task Topic 3: 4, 5, 11, 12, 13, 14,
15, 16 and 17.

other two positions on the committee were rotated from year to year among members classified as teachers. It is also interesting to note the cohesion of the members in the Mathematics Department, members 13, 26, 32 and 40, revealed by their reliance on each other. This mutual reliance contributed to the relatively high ranking achieved by members of this department on the reliance dimension. The relatively high rank of member 40 on the communication dimension was the result of a reciprocated communication link between member 40 and the Mathematics Department Head, member 13. There was a reciprocated communication link between the Superintendent and the Principal, but there was no reliance link between the Principal and the Superintendent or Assistant Superintendent. As indicated by the communication weights, this did not seem to be a topic of much discussion among teachers or between teachers and Department Heads.

Task Topic 2, Instructional Facilities. As revealed in Table IV (p. 97), those members classified as influentials on Task Topic 2 were members 4, 5 and 14. In addition all Department Heads ranked relatively high on this topic. The influence seemed to be centred in the Principal, the Vice-Principal and the Department Heads.

Member 6, the Chief Industrial Arts Teacher, member 7, the Science Supervisor, member 8, the French Supervisor, and member 9, the Chief Librarian had little contact with members of the school staff, and therefore ranked low on the communications dimension. However, there were reliance links between these members and the Superintendent and Assistant Superintendent, and these members ranked

relatively high on the reliance and attributed influence dimensions. These members had no communication links or reliance links with the Principal or Vice-Principal.

There was a reciprocated communication link between the Superintendent and the Principal, and there were reciprocated reliance links between the Superintendent, the Assistant Superintendent, the Principal and the Vice-Principal.

The librarian, member 18, ranked relatively low on the communication dimension, but ranked relatively high on the reliance and attributed influence dimensions because of reliance and attributed influence links between the Librarian and the Vice-Principal, and Department Heads 11, 12, 14 and 15. The relatively high ranks of the two counsellors, members 19 and 20, on the communication dimension were the result of reciprocated communication links between the two counsellors and the Vice-Principal. The two counsellors ranked relatively low on the other two dimensions. As indicated by the communication weights there seemed to be interaction amongst virtually all members of the system on the topic of the provision of facilities, equipment and supplies, with member 10 being the only member with no reciprocated communication links.

Task Topic 3, Teaching Assignments. As revealed in Table IV (page 97), those members classified as influentials on Task Topic 3 were members 4, 5, 11, 12, 13, 14, 15, 16 and 17. The influence on this topic seemed to be centred in the Principal, the Vice-Principal and the Department Heads.

The reciprocated communication links between the Principal and the Superintendent and Assistant Superintendent related to discussions concerning the assignment of teachers to this school. There were no reliance links nor attributed influence links from the Principal to the Superintendent or the Assistant Superintendent.

It was again interesting to note the cohesion of the members of the Mathematics Department, members 13, 26, 32 and 40, revealed by their reliance on each other. This mutual reliance contributed to the relatively high rankings achieved by members of this department on the reliance dimension. There were reciprocated communication links between the Head of the Physical Education Department, member 17, and the two female members of that department, members 35 and 41, but not with the other male member of the department, member 37, resulting in relatively high rankings on the communication dimension for members 36 and 41, while member 37 had no reciprocated communication links. As indicated by the communication weights, there seemed to be little interaction among teachers concerning the allocation of teaching assignments, with the interaction taking place between teachers and Department Heads and Administrators.

Task Topic 4, Course Content. As revealed in Table V (p. 101), those members classified as influentials on Task Topic 4 were members 4, 11, 18, 33, 39 and 44. Member 11, the English Department Head, member 18, the librarian, members 33 and 44 of the Social Studies Department, and member 39 of the English Department were all actively engaged in the recent innovation of the library centred research

TABLE V
COMMUNICATIONS, RELIANCE AND ATTRIBUTED INFLUENCE WEIGHTS
AND
RANKS FOR TASK TOPICS 4, 5 AND 6.

TASK TOPIC 4									TASK TOPIC 5									TASK TOPIC 6								
Course Content									Teaching Methodology									Classroom Organization								
Dimension 1			Dimension 2			Dimension 3			Dimension 1			Dimension 2			Dimension 3			Dimension 1			Dimension 2			Dimension 3		
Communi- cations			Reliance			Attributed Influence			Communi- cations			Reliance			Attributed Influence			Communi- cations			Reliance			Attributed Influence		
M	W	R	M	W	R	M	W	R	M	W	R	M	W	R	M	W	R	M	W	R	M	W	R	M	W	R
E	E	A	E	E	A	E	E	A	E	E	A	E	E	A	E	E	A	E	E	A	E	E	A	E	E	A
M	I	N	M	I	N	M	I	N	M	I	N	M	I	N	M	I	N	M	I	N	M	I	N	M	I	N
B	O	K	B	O	K	B	O	K	B	O	K	B	O	K	B	O	K	B	O	K	B	O	K	B	O	K
E	H		E	H		E	H		E	H		E	H		E	H		E	H		E	H		E	H	
R	T		R	T		R	T		R	T		R	T		R	T		R	T		R	T		R	T	
4	316	1	4	91	1.5	4	13	1	4	134	1	4	98	1	4	17	1	4	120	1	4	91	1	4	22	1
39	216	2	4	91	1.5	11	10	3.5	33	130	2	4	90	2	13	8	2.5	36	94	2	20	84	2	20	11	2
33	209	3	33	90	3	13	10	3.5	11	113	3	13	88	3.5	16	8	2.5	11	92	3	5	78	3.5	5	9	3
38	205	4	11	88	4	14	10	3.5	12	98	4.5	33	88	3.5	11	7	5.5	18	85	4.5	19	78	3.5	19	8	4
11	201	5	13	87	5.5	15	10	3.5	44	98	4.5	16	87	5.5	14	7	5.5	33	85	4.5	45	76	5	11	4	6.5
42	189	6	45	87	5.5	16	8	7	18	97	6	44	87	5.5	15	7	5.5	30	79	6	11	60	6	16	4	6.5
31	176	7	12	86	7.5	33	8	7	38	91	7	32	84	7	33	7	5.5	12	72	7.5	17	58	7	18	4	6.5
36	162	8	18	86	7.5	39	8	7	45	84	8	11	79	8	12	6	9.5	38	72	7.5	16	57	8.5	45	4	6.5
27	161	9	38	85	10	12	7	9.5	27	80	9	39	78	9	18	6	9.5	14	71	9.5	18	57	8.5	17	3	10.5
44	149	10	39	85	10	18	7	9.5	39	79	10	45	76	10	39	6	9.5	27	71	9.5	13	56	11	33	3	10.5
18	146	11	44	85	10	5	6	15	31	72	11	15	75	11.5	45	6	9.5	35	67	11.5	15	56	11	39	3	10.5
12	129	12	27	83	12.5	25	6	15	14	64	14	42	75	11.5	8	5	14	43	67	11.5	39	56	11	42	3	10.5
17	107	13	42	83	12.5	29	6	15	25	64	14	18	74	14	17	5	14	31	61	13	14	55	13	12	2	18.5
23	91	14	15	82	14	30	6	15	30	64	14	25	74	14	36	5	14	44	57	14	37	54	14	13	2	18.5
37	90	15.5	16	77	15	40	6	15	35	64	14	40	74	14	42	5	14	37	52	15	25	51	15	14	2	18.5
45	90	15.5	36	75	16	41	6	15	43	64	14	5	73	16	44	5	14	25	49	16.5	42	40	16	15	2	18.5
13	81	17	5	64	17	42	6	15	36	59	17	17	72	17	5	4	19.5	42	49	16.5	33	39	17	23	2	18.5
16	75	18	43	58	18	44	6	15	2	57	18	27	70	18	25	4	19.5	45	48	18	12	30	20	25	2	18.5
24	65	19	26	57	19.5	45	6	15	23	56	19.5	26	67	19	32	4	19.5	39	47	19	27	30	20	27	2	18.5
43	56	20	32	57	19.5	17	5	24	42	56	19.5	37	63	20.5	37	4	19.5	17	44	20	36	30	20	36	2	18.5
41	51	21	23	55	21.5	23	5	24	13	46	21	41	63	20.5	40	4	19.5	5	39	21	38	30	20	37	2	18.5
30	49	22.5	29	55	21.5	26	5	24	1	42	22	21	61	22	41	4	19.5	15	32	22.5	44	30	20	38	2	18.5
35	49	22.5	37	50	23.5	27	5	24	26	27	23.5	23	50	23	2	3	27	41	32	22.5	23	12	23.5	41	2	18.5
14	46	24	41	50	23.5	32	5	24	40	27	23.5	36	49	24	3	3	27	13	28	24	41	12	23.5	44	2	18.5
26	40	26	19	49	25	36	5	24	17	25	25	12	39	25	22	3	27	23	24	25	8	2	26.5	8	1	30.5
32	40	26	40	47	26	37	5	24	44	22	26	38	38	26	23	3	27	1	22	26.5	22	2	26.5	21	1	30.5
40	40	26	25	26	27.5	38	5	24	16	20	27.5	30	24	27	26	3	27	19	22	26.5	28	2	26.5	22	1	30.5
21	34	28	30	26	27.5	46	5	24	21	20	27.5	8	15	28	27	3	27	40	21	28	29	2	26.5	24	1	30.5
5	28	29	8	22	29	8	4	33	32	16	29	3	13	30	29	3	27	29	17	29.5	1	1	37.5	26	1	30.5
29	15	30.5	35	20	30	21	4	33	3	12	31	6	13	30	30	3	27	46	17	29.5	2	1	37.5	28	1	30.5
46	15	30.5	17	19	31	22	4	33	6	12	31	7	13	30	38	3	27	16	13	31.5	3	1	37.5	29	1	30.5
25	13	32	46	18	32	24	4	33	8	12	31	2	10	32	6	2	36.5	21	13	31.5	6	1	37.5	31	1	30.5
15	12	33	20	17	33	28	4	33	15	8	34	28	4	33.5	7	2	36.5	26	11	33.5	7	1	37.5	32	1	30.5
8	6	34.5	2	3	34.5	31	4	33	29	8	34	34	4	33.5	19	2	36.5	32	11	33.5	9	1	37.5	34	1	30.5
22	6	34.5	3	3	34.5	34	4	33	46	8	34	22	2	35.5	21	2	36.5	28	1	35.5	10	1	37.5	35	1	30.5
2	4	36	6	2	37	35	4	33	37	7	36	29	2	35.5	24	2	36.5	34	1	35.5	21	1	37.5	40	1	30.5
3	2	37.5	7	2	37	43	4	33	28	1	37.5	1	1	41.5	28	2	36.5	2	0	41.5	24	1	37.5	1	0	41.5
6	2	37.5	28	2	37	2	3	38.5	34	1	37.5	9	1	41.5	31	2	36.5	3	0	41.5	26	1	37.5	2	0	41.5
19	1	40.5	1	1	42.5	19	3	38.5	5	0	42.5	10	1	41.5	34	2	36.5	6	0	41.5	30	1	37.5	3	0	41.5
20	1	40.5	9	1	42.5	6	2	40.5	7	0	42.5	19	1	41.5	35	2	36.5	7	0	41.5	31	1	37.5	6	0	41.5
28	1	40.5	10	1	42.5	20	2	40.5	9	0	42.5	20	1	41.5	46	2	36.5	8	0	41.5	32	1	37.5	7	0	41.5
34	1	40.5	21	1	42.5	1	1	43	10	0	42.5	24	1	41.5	20	1	42.5	9	0	41.5	34	1	37.5	9	0	41.5
1	0	44.5	22	1	42.5	3	1	43	19	0	42.5	31	1	41.5	43	1	42.5	10	0	41.5	35	1	37.5	10	0	41.5
7	0	44.5	24	1	42.5	7	1	43	20	0	42.5	35	1	41.5	1	0	45	20	0	41.5	40	1	37.5	30	0	41.5
9	0	44.5	31	1	42.5	9	0	45.5	22	0	42.5	43	1	41.5	9	0	45	22	0	41.5	43	1	37.5	43	0	41.5
10	0	44.5	44	1	42.5	10	0	45.5	24	0	42.5	46	1	41.5	10	0	45	24	0	41.5	46	1	37.5	46	0	41.5

Members classified as influentials on
Task Topic 4: 4, 11, 18, 33, 39, 44.

Members classified as influentials on
Task Topic 5: 4, 11, 33, 39, 45.

Members classified as influentials on
Task Topic 6: 4, 11, 18.

approach to the teaching of English and Social Studies to students in the senior grades. There seemed to be much interaction and mutual reliance among these members on this topic. The Vice-Principal did not seem to be actively involved with this group.

Department Heads generally ranked relatively high with the exception that members 14 and 15 ranked relatively low on the communications dimension and member 17 ranked relatively low on the reliance and attributed influence dimension.

The Director, the Chief Industrial Arts Teacher and the Science and French Supervisors ranked relatively low on all dimensions, as did the Superintendent and Assistant Superintendent.

Member 42 of the English Department was actively engaged in the library centred teaching innovation. Members 27 and 31 of the English Department, and members 36 and 38 of the Social Studies Department were not involved in the library centred teaching innovation but gained from their association with the members who were engaged. These teachers ranked relatively high on the communications dimension, all but member 31 ranked relatively high on the reliance dimension, but all ranked lower on the attributed influence dimension. Member 45 of the English Department, also actively involved in the library centred teaching innovation, ranked relatively high on the reliance dimension, but low on the other two dimensions. The only reciprocated communication link between members of the school staff and members of the system who were not members of the school staff was between the Principal and the Superintendent. There were no reliance links

between members of the school staff and members of the system who were not members of the school staff. The selection of the content to be taught in each course seems to be a topic on which the interaction was confined to members of the school staff and took place among teachers and between teachers, Department Heads and the Principal.

Task Topic 5, Teaching Methodology. As revealed by Table V, (p. 101), the members classified as influentials on Task Topic 5 were members 4, 11, 33, 39 and 45. These members were all active in the library centred teaching innovation. Although the librarian, member 18, was not classified as an influential on this topic, she did rank high on the communication and attributed influence dimensions, and ranked just below the upper quartile on the reliance dimension. Member 45, who ranked high on the reliance dimension and relatively high on the attributed influence dimension of Task Topic 4, was classed as an influential on this topic, while member 44, who was classified as an influential on Task Topic 4, and who ranked high on the communication and reliance dimensions fell below the upper quartile on the attributed influence dimension of this topic.

Of the Department Heads, member 12 ranked high on the communications and attributed influence dimensions, but much lower on the reliance dimension. Member 14 ranked first on the reliance dimension and high on the attributed influence dimension while ranking just below the upper quartile on the communications dimension. Members 13, 15, 16 and 17 all ranked relatively low on the communications dimension and higher on the other two dimensions.

Members 18, 27, 31, 38 and 44 ranked relatively high on the communications dimension, and with the exception of member 31, ranked relatively high on the reliance dimension. Member 32 of the Mathematics Department ranked high on the reliance dimension because of a reliance link between her and member 13, the Department Head.

The only reciprocated communications links between members of the school staff and members of the system who were not members of the school staff were between the Principal, the Superintendent and the Assistant Superintendent. There were no reliance or attributed influence links from members of the school staff to members of the system who were not members of the school staff. The selection of the methodology of instruction to be used in each course was a topic on which the interaction seemed to be confined to the school staff and took place among teachers, and between teachers and the Principal.

Task Topic 6, Classroom Organization. As revealed in Table V (p. 101), the members classified as influentials on this topic were members 4, 11 and 18, although members 33, 39, 44 and 45 ranked relatively high on all dimensions. As on Task Topics 4 and 5, these members were all actively engaged in the library centred teaching innovation which required cooperation between these members to take advantage of the possible flexibility in organizing their classes for instruction. Of the Department Heads, members 12 and 14 ranked high on the communications dimension, but lower on the reliance dimension, while members 13, 15, 16 and 17 ranked relatively low on the communication dimension but higher on the reliance dimension

Member 36 ranked very high on the communication dimension, but lower on the other two dimensions. The counsellors, members 19 and 20, ranked relatively low on the communication dimension but ranked high on the other two dimensions. This may be accounted for by the reports from a number of teachers and Department Heads that they infrequently sought the advice of the counsellors in regard to the organization of their classes to meet specific needs of specific students.

The only link between members of the school staff and members of the system who were not members of the school staff was a reciprocated communication link between the Principal and the Superintendent. Classroom organization for instruction was a topic on which the interaction was confined to members of the school staff and took place among teachers and between teachers and the Principal.

Task Topic 7, Student Evaluation. As revealed in Table VI (p. 106), the members classified as influentials were members 4, 11, 12, 13, 14 and 17. Members 5, 15 and 16 ranked relatively low on the communication dimension, but ranked relatively high on the other two dimensions. Influence on this topic seemed to be centred in the Principal, Vice-Principal and the Department Heads.

Members 33, 39, 42 and 45 all ranked high on the communication dimension. Members 39 and 42 ranked lower on the reliance dimension, while member 39 ranked high, and member 42 ranked relatively high on the attributed influence dimension. Member 45 ranked relatively high on all dimensions. These members were all actively engaged in the

TABLE VI
COMMUNICATIONS, RELIANCE AND ATTRIBUTED INFLUENCE WEIGHTS
AND
RANKS FOR TASK TOPICS 7, 8 AND 9.

TASK TOPIC 7 Student Evaluation									TASK TOPIC 8 Grading and Promotion									TASK TOPIC 9 Student Discipline								
Dimension 1			Dimension 2			Dimension 3			Dimension 1			Dimension 2			Dimension 3			Dimension 1			Dimension 2			Dimension 3		
Communications			Reliance			Attributed Influence			Communications			Reliance			Attributed Influence			Communications			Reliance			Attributed Influence		
M	W	R	M	W	R	M	W	R	M	W	R	M	W	R	M	W	R	M	W	R	M	W	R	M	W	R
E	E	A	E	E	A	E	E	A	E	E	A	E	E	A	E	E	A	E	E	A	E	E	A	E	E	A
M	I	N	M	I	N	M	I	N	M	I	N	M	I	N	M	I	N	M	I	N	M	I	N	M	I	N
B	G	K	B	G	K	B	G	K	B	G	K	B	G	K	B	G	K	B	G	K	B	G	K	B	G	K
E	H		E	H		E	H		E	H		E	H		E	H		E	H		E	H		E	H	
R	T		R	T		R	T		R	T		R	T		R	T		R	T		R	T		R	T	
11	133	1	4	146	1	4	30	1	4	258	1	4	194	1	4	36	1	5	856	1	4	167	1	4	40	1
4	132	2	4	132	2	5	11	2	11	165	2	13	168	2.5	11	13	2	4	108	2	5	163	2	5	33	2
13	84	3.5	13	131	3.5	11	10	4	13	123	3	14	168	2.5	12	11	3.5	19	70	3.5	20	111	3	20	14	3
14	84	3.5	15	131	3.5	14	10	4	14	115	4	11	167	4	14	11	3.5	20	70	3.5	19	108	4	19	10	4
42	71	5	5	130	5.5	15	10	4	15	112	5	5	166	7	13	10	6.5	1	46	5	2	9	5	16	5	5.5
12	70	6.5	16	130	5.5	13	9	6.5	5	111	6	15	166	7	15	10	6.5	11	34	19.5	3	6	6	32	5	5.5
33	70	6.5	20	129	7	16	9	6.5	17	110	7	16	166	7	16	10	6.5	12	34	19.5	1	5	7	3	4	11
36	68	8	12	128	8.5	12	8	8	36	82	8	19	166	7	20	10	6.5	13	34	19.5	13	3	8	11	4	11
17	66	9	19	128	8.5	39	6	9	19	80	9	20	166	7	5	9	9	14	34	19.5	11	2	17	12	4	11
27	59	11	11	120	10	17	5	12.5	25	78	10	12	165	10	2	6	11.5	15	34	19.5	15	2	17	14	4	11
39	59	11	17	117	11.5	20	5	12.5	12	73	11	2	164	11.5	17	6	11.5	16	34	19.5	16	2	17	17	4	11
45	59	11	33	117	11.5	30	5	12.5	16	69	12	32	164	11.5	19	6	11.5	17	34	19.5	17	2	17	26	4	11
38	46	13.5	32	113	14	41	5	12.5	2	67	13	1	163	13	45	6	11.5	21	34	19.5	22	2	17	30	4	11
44	46	13.5	39	113	14	42	5	12.5	39	66	14	41	157	14	26	5	16.5	22	34	19.5	33	2	17	33	4	11
31	45	15	40	113	14	45	5	12.5	1	64	15	26	156	15	30	5	16.5	23	34	19.5	38	2	17	40	4	11
25	43	18.5	45	112	16	2	4	22.5	45	59	16	39	155	17	32	5	16.5	24	34	19.5	6	1	31	1	3	26
26	43	18.5	41	107	17	19	4	22.5	33	57	17	40	155	17	39	5	16.5	25	34	19.5	7	1	31	13	3	26
30	43	18.5	24	106	18.5	22	4	22.5	30	55	18.5	42	155	17	41	5	16.5	26	34	19.5	8	1	31	15	3	26
32	43	18.5	26	106	18.5	23	4	22.5	43	55	18.5	45	154	19	42	5	16.5	27	34	19.5	9	1	31	21	3	26
40	43	18.5	42	85	20	25	4	22.5	23	54	20	3	153	22.5	23	4	23.5	28	34	19.5	10	1	31	22	3	26
43	43	18.5	36	81	22	27	4	22.5	20	49	21	25	153	22.5	25	4	23.5	29	34	19.5	12	1	31	23	3	26
15	40	22	37	81	22	32	4	22.5	27	45	22	27	153	22.5	27	4	23.5	30	34	19.5	14	1	31	24	3	26
23	39	23	44	81	22	33	4	22.5	32	35	24	30	153	22.5	33	4	23.5	31	34	19.5	18	1	31	25	3	26
41	34	24	2	20	24	35	4	22.5	37	35	24	35	153	22.5	35	4	23.5	32	34	19.5	21	1	31	27	3	26
37	31	25	8	19	25	36	4	22.5	40	35	24	43	153	22.5	36	4	23.5	33	34	19.5	23	1	31	28	3	26
5	30	26	1	11	27	37	4	22.5	21	31	27.5	17	134	26	37	4	23.5	34	34	19.5	24	1	31	29	3	26
16	17	27.5	3	11	27	40	4	22.5	31	31	27.5	33	133	27	40	4	23.5	36	34	19.5	25	1	31	31	3	26
21	17	27.5	6	11	27	44	4	22.5	42	31	27.5	36	118	29.5	21	3	32	39	34	19.5	26	1	31	35	3	26
22	15	29.5	7	10	29	46	4	22.5	44	31	27.5	37	118	29.5	24	3	32	43	34	19.5	27	1	31	36	3	26
29	15	29.5	25	7	31	21	3	34.5	26	27	30	38	118	29.5	28	3	32	44	34	19.5	28	1	31	37	3	26
46	10	31	30	7	31	24	3	34.5	29	24	31.5	44	118	29.5	29	3	32	46	34	19.5	29	1	31	38	3	26
2	4	32	46	7	31	26	3	34.5	46	24	31.5	23	53	32	34	3	32	2	13	32.5	30	1	31	39	3	26
1	2	33.5	22	5	33.5	27	3	34.5	41	23	33	7	42	33.5	38	3	32	3	13	32.5	31	1	31	41	3	26
3	2	33.5	29	5	33.5	28	3	34.5	38	19	34	8	42	33.5	43	3	32	6	0	40	32	1	31	42	3	26
28	1	35.5	35	4	35.5	31	3	34.5	3	15	35	28	2	35.5	44	3	32	7	0	40	34	1	31	44	3	26
34	1	35.5	43	4	35.5	34	3	34.5	28	1	36.5	46	2	35.5	46	3	32	8	0	40	35	1	31	45	3	26
6	0	41.5	23	3	37	38	3	34.5	34	1	36.5	6	1	41.5	8	2	38	9	0	40	36	1	31	2	2	39
7	0	41.5	18	2	38.5	43	3	34.5	6	0	42	9	1	41.5	22	2	38	10	0	40	37	1	31	18	2	39
8	0	41.5	28	2	38.5	18	2	39	7	0	42	10	1	41.5	31	2	38	18	0	40	39	1	31	34	2	39
9	0	41.5	9	1	43	1	1	40.5	8	0	42	18	1	41.5	1	1	41	35	0	40	40	1	31	43	2	39
10	0	41.5	10	1	43	3	1	40.5	9	0	42	21	1	41.5	3	1	41	37	0	40	41	1	31	46	2	39
18	0	41.5	21	1	43	6	0	44	10	0	42	22	1	41.5	18	1	41	38	0	40	42	1	31	10	1	42
19	0	41.5	27	1	43	7	0	44	18	0	42	24	1	41.5	6	0	44.5	40	0	40	43	1	31	6	0	44.5
20	0	41.5	31	1	43	8	0	44	22	0	42	29	1	41.5	7	0	44.5	41	0	40	44	1	31	7	0	44.5
24	0	41.5	34	1	43	9	0	44	24	0	42	31	1	41.5	9	0	44.5	42	0	40	45	1	31	8	0	44.5
35	0	41.5	38	1	43	10	0	44	35	0	42	34	1	41.5	10	0	44.5	45	0	40	46	1	31	9	0	44.5

Members classified as influentials on Task Topic 7: 4, 11, 12, 13, 14, 17.

Members classified as influentials on Task Topic 8: 4, 5, 11, 12, 13, 14, 15, 19.

Members classified as influentials on Task Topic 9: 4, 5, 19, 20.

library centred teaching innovation.

The fact that the two counsellors ranked high on the reliance dimension may be explained by reports from a number of teachers and Department Heads that the advice of the counsellors was sought frequently concerning the evaluation of specific students.

The only link between members of the school staff and members of the system who were not members of the school staff was a reciprocated communication link between the Principal and the Superintendent. Student evaluation practices was a topic on which the interaction was confined to members of the school staff and seemed to take place among teachers, between teachers and Department Heads, and between Department Heads, and the Principal and Vice-Principal.

Task Topic 8, Grading and Promotion. As revealed in Table VI (p. 106), the members classified as influentials on Task Topic 8 were members 4, 11, 12, 13, 14, and 15. Member 16 ranked just below the upper quartile on the communication dimension and ranked high on the other two dimensions, while member 17 ranked high on the communication dimension, below the median on the reliance dimension and just below the upper quartile on the attributed influence dimension. Influence on this topic seemed to be centred in the Principal, the Vice-Principal and the Department Heads.

Member 25 ranked high on the communication dimension because of reciprocated communication links with the Vice-Principal and with member 14, his Department Head. He did not rank high on the other two dimensions. Member 36 ranked high on the communication dimension

because of reciprocated communication links with members 11, 17, 33 and 39. She did not rank high on the other two dimensions.

The Assistant Superintendent ranked relatively high on all dimensions because of a reciprocated communication link with, and a reliance link and attributed influence link from the Principal. The Superintendent ranked relatively high on the communication and reliance dimensions because of a reciprocated communication link with and a reliance link from the Principal. The Director ranked above the median on the reliance dimension because of a reliance link from the Assistant Superintendent. The grading and promotion of students was a topic on which the interaction seemed to be between teachers and Department Heads, and between the Department Heads and the Principal and Vice-Principal, with the Principal in communication with and relying upon the Superintendent and Assistant Superintendent.

Task Topic 9, Student Discipline. As revealed in Table VI (p. 106), those members classified as influentials on Task Topic 9 were members 4, 5, 19 and 20. On this topic influence seemed to be centred in the Principal, the Vice-Principal and the two counsellors.

The high communication weight of the Vice-Principal agrees with the fact that virtually all discipline problems were handled initially by him. There were reciprocated communication, reliance and attributed influence links between the Principal and the Vice-Principal. The two counsellors achieved their high ranking because of reciprocated communication links between the Vice-Principal, the Principal and the counsellors, reciprocated reliance links between the Principal and the

counsellors, and attributed influence links from a number of teachers and Department Heads. There were no reciprocated communication links between the counsellors and coordinators or teachers.

The high ranking of the Superintendent on the communications dimension resulted from a reciprocated communication link between the Principal and the Superintendent. The rankings of the Superintendent, Assistant Superintendent and Director on the reliance dimension resulted from reciprocated reliance links between the Superintendent and the Director and reliance links from both of these members to the Assistant Superintendent. The weight of the Director on the attributed influence dimension was the result of attributed influence links from the Superintendent, the Assistant Superintendent, the Special Counsellor and the male counsellor, member 20. This may be explained by the Principal's report that he discussed all serious disciplinary cases with the Superintendent, and the Superintendent's report that any discipline case which may involve action by the Board was investigated by the Director, assisted by the Special Counsellor. Student discipline practices was a topic on which most interaction seemed to be between teachers and the Vice-Principal, and between the Vice-Principal, the Principal and the counsellors.

Task Topic 10, Student Accounting. As revealed in Table VII (p. 110), those members classified as influentials on Task Topic 10 were members 2, 4, 5, 19 and 20. The influence on this topic seemed to be centred in the Principal, the Vice-Principal and the two counsellors.

TABLE VII
COMMUNICATIONS, RELIANCE AND ATTRIBUTED INFLUENCE WEIGHTS
AND
RANKS FOR TASK TOPICS 10, 11 AND 12

TASK TOPIC 10 Student Accounting									TASK TOPIC 11 Extra-Curricular Activities									TASK TOPIC 12 Parent Relationships								
Dimension 1			Dimension 2			Dimension 3			Dimension 1			Dimension 2			Dimension 3			Dimension 1			Dimension 2			Dimension 3		
Communi- cations			Reliance			Attributed Influence			Communi- cations			Reliance			Attributed Influence			Communi- cations			Reliance			Attributed Influence		
M	W	R	M	W	R	M	W	R	M	W	R	M	W	R	M	W	R	M	W	R	M	W	R	M	W	R
E	E	A	E	E	A	E	E	A	E	E	A	E	E	A	E	E	A	E	E	A	E	E	A	E	E	A
M	I	N	M	I	N	M	I	N	M	I	N	M	I	N	M	I	N	M	I	N	M	I	N	M	I	N
B	G	K	B	G	K	B	G	K	B	G	K	B	G	K	B	G	K	B	O	K	B	G	K	B	G	K
E	H		E	H		E	H		E	H		E	H		E	H		E	H		E	H		E	H	
R	T		R	T		R	T		R	T		R	T		R	T		R	T		R	T		R	T	
4	13	1	4	159	1	4	30	1	17	52	1	4	174	1	4	31	1	20	2036	1	20	212	1	4	38	1
19	10	2.5	5	151	2	5	29	2	4	38	2	5	164	2	5	20	2	19	1966	2	4	211	2	20	37	2
20	10	2.5	19	147	3.5	19	17	3.5	19	36	3	19	156	3.5	17	15	3	4	266	3	19	207	3	19	32	3
13	6	5	20	147	3.5	20	17	3.5	5	34	4	20	156	3.5	20	12	4	5	262	4	5	197	4	5	24	4
14	6	5	1	11	5.5	1	2	8.5	1	14	5	17	155	5	19	11	5	32	261	5.5	33	173	5	17	4	5
32	6	5	2	11	5.5	2	2	8.5	32	11	7.5	41	147	6	37	9	6	40	261	5.5	11	172	8.5	3	3	6.5
5	5	7	3	7	7	11	2	8.5	36	11	7.5	36	146	7.5	41	8	7	10	197	7	13	172	8.5	11	3	6.5
2	4	8	11	3	8	14	2	8.5	37	11	7.5	37	146	7.5	36	7	8	11	194	19	16	172	8.5	1	2	15
30	3	9.5	12	2	16	15	2	8.5	41	11	7.5	32	145	9	32	5	9.5	12	194	19	17	172	8.5	10	2	15
40	3	9.5	13	2	16	16	2	8.5	42	138	10	42	138	10	42	5	9.5	13	194	19	40	172	8.5	13	2	15
1	2	11.5	15	2	16	23	2	8.5	24	9	10.5	1	137	11	18	4	11	14	194	19	42	172	8.5	16	2	15
3	2	11.5	16	2	16	45	2	8.5	2	1	12.5	40	89	12.5	1	3	15	15	194	19	3	7	12	22	2	15
27	1	13.5	17	2	16	3	1	23	3	1	12.5	46	89	12.5	11	3	15	16	194	19	1	6	13	23	2	15
42	1	13.5	23	2	16	12	1	23	6	0	30	2	2	20	23	3	15	17	194	19	2	5	14.5	26	2	15
6	0	30.5	25	2	16	13	1	23	7	0	30	11	2	20	26	3	15	21	194	19	10	5	14.5	29	2	15
7	0	30.5	26	2	16	17	1	23	8	0	30	13	2	20	33	3	15	22	194	19	12	2	16.5	33	2	15
8	0	30.5	30	2	16	22	1	23	9	0	30	18	2	20	39	3	15	23	194	19	14	2	16.5	34	2	15
9	0	30.5	32	2	16	24	1	23	10	0	30	23	2	20	45	3	15	26	194	19	6	1	32	36	2	15
10	0	30.5	33	2	16	26	1	23	11	0	30	24	2	20	13	2	22.5	27	194	19	7	1	32	38	2	15
11	0	30.5	39	2	16	27	1	23	12	0	30	25	2	20	15	2	22.5	29	194	19	8	1	32	39	2	15
12	0	30.5	40	2	16	28	1	23	13	0	30	26	2	20	16	2	22.5	30	194	19	9	1	32	42	2	15
15	0	30.5	42	2	16	29	1	23	14	0	30	29	2	20	21	2	22.5	33	194	19	15	1	32	45	2	15
16	0	30.5	45	2	16	31	1	23	15	0	30	30	2	20	22	2	22.5	35	194	19	18	1	32	2	1	32.5
17	0	30.5	6	1	35	32	1	23	16	0	30	33	2	20	27	2	22.5	36	194	19	21	1	32	12	1	32.5
18	0	30.5	7	1	35	33	1	23	18	0	30	39	2	20	29	2	22.5	38	194	19	22	1	32	14	1	32.5
21	0	30.5	8	1	35	34	1	23	21	0	30	45	2	20	31	2	22.5	39	194	19	23	1	32	15	1	32.5
22	0	30.5	9	1	35	35	1	23	22	0	30	3	1	36.5	12	1	33	43	194	19	24	1	32	18	1	32.5
23	0	30.5	10	1	35	36	1	23	23	0	30	6	1	36.5	14	1	33	44	194	19	25	1	32	21	1	32.5
24	0	30.5	14	1	35	38	1	23	25	0	30	7	1	36.5	24	1	33	45	194	19	26	1	32	24	1	32.5
25	0	30.5	18	1	35	39	1	23	26	0	30	8	1	36.5	25	1	33	46	194	19	27	1	32	25	1	32.5
26	0	30.5	21	1	35	41	1	23	27	0	30	9	1	36.5	28	1	33	24	97	33.5	28	1	32	27	1	32.5
28	0	30.5	22	1	35	42	1	23	28	0	30	10	1	36.5	30	1	33	25	97	33.5	29	1	32	28	1	32.5
29	0	30.5	24	1	35	44	1	23	29	0	30	12	1	36.5	34	1	33	28	97	33.5	30	1	32	30	1	32.5
31	0	30.5	27	1	35	6	0	40	30	0	30	14	1	36.5	35	1	33	31	97	33.5	31	1	32	31	1	32.5
33	0	30.5	28	1	35	7	0	40	31	0	30	15	1	36.5	38	1	33	37	97	33.5	32	1	32	32	1	32.5
34	0	30.5	29	1	35	8	0	40	33	0	30	16	1	36.5	40	1	33	41	97	33.5	34	1	32	35	1	32.5
35	0	30.5	31	1	35	9	0	40	34	0	30	21	1	36.5	43	1	33	1	68	37	35	1	32	37	1	32.5
36	0	30.5	34	1	35	10	0	40	35	0	30	22	1	36.5	44	1	33	3	65	38	36	1	32	40	1	32.5
37	0	30.5	35	1	35	18	0	40	38	0	30	27	1	36.5	46	1	33	2	0	42.5	37	1	32	41	1	32.5
38	0	30.5	36	1	35	21	0	40	39	0	30	28	1	36.5	2	0	43	6	0	42.5	38	1	32	43	1	32.5
39	0	30.5	37	1	35	25	0	40	40	0	30	31	1	36.5	3	0	43	7	0	42.5	39	1	32	44	1	32.5
41	0	30.5	38	1	35	30	0	40	42	0	30	34	1	36.5	6	0	43	8	0	42.5	41	1	32	46	1	32.5
43	0	30.5	41	1	35	37	0	40	43	0	30	35	1	36.5	7	0	43	9	0	42.5	43	1	32	6	0	44.5
44	0	30.5	43	1	35	40	0	40	44	0	30	38	1	36.5	8	0	43	18	0	42.5	44	1	32	7	0	44.5
45	0	30.5	44	1	35	43	0	40	45	0	30	43	1	36.5	9	0	43	34	0	42.5	45	1	32	8	0	44.5
46	0	30.5	46	1	35	46	0	40	46	0	30	44	1	36.5	10	0	43	42	0	42.5	46	1	32	9	0	44.5

Members classified as influentials on
Task Topic 10: 2, 4, 5, 19, 20

Members classified as influentials on
Task Topic 11: 4, 5, 17, 19, 20, 32, 36,
37 and 41

Members classified as influentials on
Task Topic 12: 4, 5, 11, 13, 19, 20

There was a reciprocated communication link between the Principal and the Superintendent, between the Superintendent and the Assistant Superintendent, and between the Assistant Superintendent and the Director. This communication resulted from the necessity for student accounting practices to meet the requirements of the Board and of the Provincial Department.

As indicated by the communication weights, student accounting practices was a topic on which there was little interaction among teachers, or between teachers and administrators.

Task Topic 11, Extra-Curricular Activities. As revealed in Table VII, (p. 110), those members classified as influentials on Task Topic 11 were members 4, 5, 17, 19, 20, 32, 36, 37 and 41. Members 17, 36, 37 and 41 were members of the Physical Education Department, while members 32 and 20 assisted in team athletic activities. Counsellors 19 and 20 worked closely with the Student Council in fostering and obtaining sponsors for extra-curricular activities, and discussed the advisability of the participation of specific students with the Principal, the Vice-Principal, and teachers. Influence on this topic seemed to be centred in the Principal, the Vice-Principal, the counsellors and those staff members concerned with team athletic activities. This is explained by the Principal's report that there was a strong extra-curricular program in athletics, but very little in other areas. There were reciprocated communication and reliance links between the Principal and the Superintendent.

As indicated by the communication weights, extra-curricular

activities was a topic on which there was little interaction among teachers.

Task Topic 12, Parent Relationships. As revealed in Table VII (p. 110), those members classified as influentials on Task Topic 12 were members 4, 5, 19 and 20. The extremely high communication weights for the two counsellors is explained by the fact that virtually all communication between the school and parents was handled initially by the counsellors.

Member 40 had a reciprocated communication link with the Principal, and member 32 had a reciprocated communication link with member 40. There were reliance links from the Principal to Department Heads 11, 13, 16 and 17. The Principal reported he respected the judgment of these members on this topic. There were also reliance links from the Principal to members 33, 40 and 42. The Principal reported that member 40 was one of the most highly skilled members of the staff in the area of human relations, and that he respected her judgment. Members 33 and 42 were in a sense protégés of the Principal. He reported that he was interested in their development, that he often discussed problems relating to this topic with them, and that he had come to respect their judgment in this area. The high communication weight for member 10, the Special Counsellor, was the result of reciprocated communication links with the counsellors and with the Director. Other than the links between member 10 and the counsellors, the only link between members of the school staff and members of the system who were not members of the school staff was a reciprocated

communication link between the Principal and the Superintendent.

Practices concerning relationships with parents was a topic on which most interaction took place between teachers and counsellors, and between counsellors and the Principal and Vice-Principal.

Summary of Communication, Reliance and Attributed Influence on Each Task Topic

The Principal was the only member of this system to be classified as an influential on all Task Topics and on the basis of this analysis appeared to be the most influential person in the system on this set of Task Topics in relation to this school. The interaction between the Principal, the Superintendent and the Assistant Superintendent was most interesting.

The Principal appeared to be in regular communication with the Superintendent with reciprocated communication links on all Task Topics with the exception of Task Topic 1. However, there were reliance links from the Principal to the Superintendent only on Task Topics 2, 8 and 11, which appeared to be areas of special interest to the Superintendent; Task Topic 2 because of his control of finance, Task Topic 8 because of the requirements of Board and Provincial Department regulations, and Task Topic 11 because of the legal aspects involved and because of his interest in public relations. Although according to Board Regulation 2120, the Assistant Superintendent was responsible for the organization, administration and supervision of all schools and their administrative and teaching personnel, and for the direction and general supervision of the total public relations

program in the School District, the Principal had little communication with the Assistant Superintendent, with reciprocated communication links on Topics 5 and 8 only. The only reliance link from the Principal to the Assistant Superintendent was on Task Topic 8. It would appear that the Principal tended to ignore the Assistant Superintendent to deal directly with the Superintendent. It would also appear that the Principal had assumed a relatively free hand and taken virtually complete responsibility for the organization, administration and supervision of his school as defined by this set of Task Topics. However, the regular communication between the Principal and the Superintendent suggests that the Principal was careful to work within the zone of acceptance of the Superintendent.

It is interesting to compare the results of this analysis with the degree of influence the Principal perceived himself to have, and with the degree of influence he would desire to have on each of these Task Topics. Although the Principal tended to underestimate his influence, his perceived degree of influence according to the data revealed in Table VIII (p. 115), was not too different from the results of this analysis, reported in Tables IV, V, VI and VII. However, he appears to have grossly underestimated his influence on Task Topic 4, course content, and Task Topic 5, classroom organization. He appeared to be unaware of the amount of influence which accrued to him through his close association with the group of teachers actively engaged in the library centred teaching innovation. Otherwise, he seemed to be aware that he had a high degree of influence on all other

TABLE VIII

ADMINISTRATORS PERCEIVED DEGREE OF INFLUENCE—SELF REPORT

Task Topic	1	2	3	4	5	6	7	8	9	10	11	12
Member												
Superintendent 1	4 ₄	1 ₁	5 ₅	6 ₆	5 ₅	3 ₃	5 ₅	5 ₅	2 ₄	5 ₅	3 ₃	4 ₄
Assistant Superintendent 2	2 ₂	2 ₂	6 ₆	6 ₃	5 ₃	5 ₅	4 ₄	2 ₂	3 ₃	3 ₃	4 ₄	4 ₄
Director 3	6 ₆	4 ₄	5 ₅	6 ₆	4 ₄	6 ₆	6 ₆	4 ₄	4 ₄	5 ₅	5 ₅	4 ₄
Principal 4	1 ₁	3 ₃	1 ₁	4 ₅	2 ₄	6 ₆	2 ₄	2 ₂	2 ₂	2 ₂	3 ₃	2 ₂
Vice-Principal 5	4 ₄	2 ₂	4 ₄	5 ₅	5 ₅	5 ₅	4 ₄	4 ₄	3 ₃	3 ₃	3 ₃	3 ₃

NOTE: The figures appearing in each cell represent classifications of the degree of influence each administrator had as perceived by the administrator.

The figures appearing as subscripts to the figures in each cell represent classifications of the degree of influence each administrator would desire to have.

Classifications: 1- very highly influential
 2- highly influential
 3- quite influential
 4- somewhat influential
 5- not very influential
 6- not influential at all

Task Topics. He seemed to desire to have the degree of influence that he perceived himself to have with the exception that he did not wish to have a high degree of influence on Task Topics 4, 5, 6 and 7. The Principal reported that the selection of course content, the selection of the methodology of instruction, classroom organization for instruction, and student evaluation practices were the responsibilities of teachers, that professional teachers should need or want little guidance, and should themselves be constantly seeking means for improvements and innovations in these areas rather than waiting for guidance and leadership from administrators. However, he reported he did not expect teachers to assume the role he felt they should assume, and he expected to continue to attempt to exercise influence in these areas.

The Superintendent and Assistant Superintendent did not appear to be generally influential members of the system on this set of Task Topics in relation to this school. According to the data revealed in Table VIII (p. 115), both members seemed to be aware of this. The Superintendent seemed to overestimate his influence on Task Topics 2, instructional facilities, 6, classroom organization, 9, student discipline and 11, extra-curricular activities, although he ranked higher on these topics than on the other eight topics. The Assistant Superintendent seemed to overrate himself on Task Topics 1, scheduling, 2, instructional facilities and 8, grading and promotion. He seemed to have more influence on Topics 10, student accounting and 11, extra-curricular activities, than on the other ten topics. These members

seemed to desire only minor changes in the degree of influence they perceived themselves as exercising on these topics. The Superintendent desired less influence on Topic 9, student discipline. He reported that he felt it should be rarely necessary for discipline problems to reach the stage where he would become involved. The Assistant Superintendent desired more influence on Topics 4, course content and 5, teaching methodology. He reported that he would prefer to see less control of curricula by the Provincial Department, so that school district personnel could have more freedom to develop curricula better suited to the interests and needs of the students being taught. He felt that Department Heads should have much more authority in curriculum matters. Both of these members reported they wished to make perfectly clear that these measures pertained to this school only, that the degree of influence they perceived themselves as having did not reflect the amount of power they could use if they wished, and that the degree of influence they perceived themselves as desiring pertained to this school only. Both stated that in relation to any other secondary school in the school district, they would have reported quite different perceptions. Both members stated that the Principal of this school was doing an excellent job and in light of this should be interfered with as little as possible.

The Director appeared to have little influence in this system, and according to the data revealed in Table VIII (p. 115) seemed to be aware of this. Although according to Board Regulation 2130 (3), his duties were to supervise, coordinate, and endeavour to improve

standards of instruction in cooperation with Principals of schools, he appeared to have little influence in instructional matters, perceived himself as having little influence, and desired to have little influence. Apparently he did not see the role of inspector, which he had assumed as his major role, as being one in which much influence could be exercised in the area of instruction. The Director also stated that his perceptions and desires pertained to this school only and would be different in relation to any other school in the school district. He stated that, "things are going very well in this school," and therefore he stayed away from it as much as possible. According to the data obtained by means of the Sociometric Questionnaire, there were no communication, reliance or attributed influence links from the Principal or the Vice-Principal to the Director.

The Vice-Principal was classified as an influential on all but four Task Topics, these four being Topics 4, 5, 6 and 7. According to the data revealed in Table VIII (p. 115), the Vice-Principal seemed to underestimate his influence generally, but seemed to be aware of his lack of influence on Task Topics 4, course content, 5, teaching methodology, 6, classroom organization and 7, student evaluation, and did not desire to have any more influence in these areas. The Vice-Principal reported that the Principal was responsible for instructional matters, and he preferred to confine himself to the other operations of the school. On all Topics other than 4, 5, 6 and 7, there were reciprocated communication, reliance and attributed influence links between the Principal and the Vice-Principal.

The Chief Industrial Arts Teacher, member 6, the Science Supervisor, member 7, and the French Supervisor, member 8, had little interaction with the members of the school staff. These members ranked higher on Task Topic 2, the provision of facilities, equipment and supplies, and had reciprocated communication links with, and reliance links from the Assistant Superintendent on this Topic. These members ranked low on Task Topics 4, course content, 5, teaching methodology, 6, classroom organization and 7, student evaluation, the Topics most closely related to instruction. There were no communication, reliance or attributed influence links between these members and the Principal and Vice-Principal.

The Chief Librarian, member 9, appeared to interact with other members of the system only on Task Topic 2, instructional facilities, where she had a reciprocated communication link with and a reliance link from the Assistant Superintendent. The only interaction with the school librarian, member 18, was also on Task Topic 2, where there were reciprocated communication, reliance and attributed influence links between these two members.

The Special Counsellor, member 10, had little interaction with members of the system, and was assigned higher ranks on Task Topic 12, parent relationships, than on any other Topic. There were reciprocated communication, and reliance links between member 10 and the school counsellors on this Topic. There were no communication, reliance or attributed influence links between the Special Counsellor and the Principal and Vice-Principal.

Of the Department Heads, member 11 was classified as an influential on nine Task Topics. He was not classified as an influential on Task Topic 2, instructional facilities, where he ranked relatively high on all dimensions, nor on Task Topics 10, student accounting, or 11, extra-curricular activities, where he ranked low. The relatively high influence of member 11 seemed to be gained from two sources. The first of these was his close association with the Principal. The Principal reported that member 11 had been in the school since it opened, resided very close to the school, identified closely with the school and was sensitive to the attitudes of students, parents, and teachers in relation to the school. For these reasons, the Principal relied on member 11 to keep him informed of the attitudes of all those connected with the school, and therefore member 11 had many communication and reliance links with the Principal. Secondly, member 11 was actively engaged with the library centred teaching innovation and gained many communications, reliance and attributed influence links through his interaction with this group.

The Department Heads generally were highly influential on Task Topics 1, scheduling, 2, instructional facilities, 3, teaching assignments, 7, student evaluation, and 8, grading and promotion, revealing their close association with the Principal in acting as a cabinet to him. They were generally not highly influential on Task Topics 9, student discipline, 10, student accounting, 11 extra-curricular activities, and 12, parent relationships, as these are not generally topics of discussion in the Department Heads meetings with

the Principal, or subject department meetings with teachers. On Task Topics 4, course content, 5, teaching methodology and 6, classroom organization, related directly to instruction, the Department Heads generally ranked low on communications, suggesting little interaction with teachers on these topics. However, generally they ranked relatively high on the reliance and attributed influence dimensions suggesting that teachers did respect their knowledge and judgment as senior teachers.

The discussion thus far has revealed that the Principal was the only administrator, and the English Department Head the only coordinator, who were classified as influentials on Task Topics 4, 5 and 6, Topics intimately related to classroom instruction.

The Counsellors, members 19 and 20, were classified as influentials on Task Topics 1, scheduling, 9, student discipline, 10, student accounting, 11, extra-curricular activities, and 12, parent relationships while the female counsellor, member 19, was also classified as an influential on Task Topic 8, grading and promotion. It would appear that the counsellors were influential in the areas of their responsibilities, and were not influential on instructional Topics.

The Librarian, member 18, was classified as an influential on Task Topics 4, course content and 6, classroom organization, and ranked relatively high on Task Topic 5, teaching methodology because of her interaction with the teachers engaged in the library centred teaching innovation. She ranked relatively high on Task Topic 2, instructional

facilities, because of her interaction with teachers and Department Heads in securing instructional materials for the library.

Members 33 and 39 were classified as influentials on Task Topics 4, course content and 5, teaching methodology, and ranked relatively high on Task Topic 6, classroom organization. It would appear that these two members were highly influential teachers in relation to instructional matters. Both were actively engaged in the library centred teaching innovation.

Member 45 was classified as an influential on Task Topic 5, teaching methodology, and ranked high on the reliance dimensions of Task Topics 3, teaching assignments, 4, course content and 6, classroom organization. It would appear that member 45 interacted little with other teachers, but was respected for his knowledge and judgment by them.

Member 36 ranked high in communications on Task Topics 2, instructional facilities, 3, teaching assignments, 4, course content, 6, classroom organization, 7, student evaluation and 8, grading and promotion, although she ranked much lower on the reliance and attributed influence dimensions of these Topics. It would appear that this member interacted much with other teachers, but had not gained sufficient respect from these teachers for the establishment of reliance and attributed influence links.

The members actively engaged in the library centred teaching innovation were the librarian, member 18, members 11, 39 and 42 of the English Department, and members 33 and 44 of the Social Studies

Department. Member 45 of the English Department, and member 12, the Social Studies Department Head, participated to a limited extent. Most of these members ranked high on the communications dimensions of Task Topics 4, course content, 5, teaching methodology, 6, classroom organization and 7, student evaluation, suggesting that participation in this innovation required much interaction between participating teachers. It would also appear from the analysis thus far, that members 11, 18, 33 and 39 were the most influential members of this group.

Care should be taken in interpreting the data reported in Tables IV, V, VI and VII. The amount of interaction of members, and thus the weights of the members on these dimensions may be to some extent a function of the size of the department to which the members were attached. There was much variation in the size of the departments with the English Department having ten members, the Social Studies and Science Departments having six members, the French Department having five members, the Mathematics and Physical Education Departments having four members and the Commerce Department having three members. In this regard, it is interesting to note that the three members who did not function within departments, member 24, the Home Economics teacher, and members 28 and 34, the two Industrial Arts teachers ranked low on virtually all dimensions of all Task Topics. It may also be the case, that the amount of interaction and the kind of interaction may have been affected by the diversification of interests of teachers who did not function wholly within one department. Eight teachers did not function wholly within one

department, with one of these teachers, member 36, functioning in three departments, English, Social Studies and Physical Education.

The discussion of the data presented in this chapter seems to provide evidence of the usefulness of this method of analysing influence structures in an organization. Different influence structures were found for each of the Task Topics for which data were gathered. Sets of influentials composed of different members were designated for each Task Topic, with the Principal being the only member designated as an influential on all Task Topics. Individual members could be ordered according to rank in relation to all other members of the system on each dimension of each Task Topic. In most cases, rankings assigned to specific members could be accounted for by means of information gathered during the personal interview, and information relating to the formal structure, the role definitions of members, and the decision-making processes of the organization. This tended to verify the data collected by means of the sociometric questionnaire and the calculation of weights on each dimension. This also tended to support the assumption that data gained by these means may be used to provide an accurate description of the communication, reliance and attributed influence structures of an organization.

The use of the three dimensions provided a set of measures on communication, reliance and attributed influence for each Task Topic. The number of communication links and the communication networks related to each Task Topic were found. The number and the direction of reliance links were ascertained, and the reliance networks traced

for each Task Topic. The number and direction of attributed influence links for each Task Topic were revealed. The ordering of respondents according to rank on each of the three dimensions for a specific Task Topic revealed significant information concerning individual members. Some members were found who were assigned similar rankings on each of the three dimensions. Other members were found who appeared to be well integrated into the communication structure, but were not relied upon, nor were they attributed influence. Members were revealed who were not well integrated into the communication structure, but who were assigned relatively high rankings on one or both of the other two dimensions. Relatively high rankings were assigned to some members on the communication and attributed influence dimensions, with relatively low rankings assigned to the same members on the reliance dimension. Thus the use of the three dimensions provided for analysis, communication, reliance and attributed influence structures for each Task Topic, and provided significant information concerning individual members. Data concerning the social relationships and interpersonal influence relationships will be presented and discussed in detail in Chapters VI and VII.

Relationship Among the Communications, Reliance and Attributed Influence Dimensions

In the discussion of the theoretical bases underlying this study it was argued that communications, reliance and attributed influence were all dimensions of the concept influence. To test the relationship between these dimensions, Spearman's Rank Correlation

Coefficients, corrected for ties (8, pp. 207-210) were calculated between each possible pair of dimensions on each Task Topic. The coefficients are presented in Table IX (p. 127). The significance of these coefficients was tested by means of the use of the t statistic developed by Kendall and reported by Seigel (8, p. 212).

As indicated in Table IX, using a two-tailed test, all correlation coefficients with the exception of those between dimensions of Task Topic 2, were significant at the .01 level, revealing that the measures obtained on these dimensions in this study were significantly related, but were not identical. This lends support to the argument that these were three dimensions of a single concept.

In attempting to explain the relatively low correlation coefficients between communication and reliance, and between communication and attributed influence, on Task Topic 2, it is pointed out that teachers normally discussed the provision of facilities, equipment and supplies in subject department meetings. It is suggested that teachers would nominate most members of their own departments on the communication dimension, but that they would rely upon the Coordinators and Administrators, to whom they attributed influence. Inspection of the original matrices of these three dimensions supported this suggestion. Further support was gained from the much higher correlation coefficient between the reliance dimension and the attributed influence dimension.

A possible explanation for the relatively high correlation coefficients between the reliance and attributed influence dimensions

TABLE IX

SPEARMAN RANK CORRELATION COEFFICIENTS BETWEEN
DIMENSIONS ON EACH TASK TOPIC

Task Topics	<u>Dimensions</u>		
	Communication Reliance	Communication Attributed Influence	Reliance Attributed Influence
Task 1, Scheduling	.85	.71	.68
Task 2, Instruction Facilities	.21**	.33*	.65
Task 3, Teaching Assignments	.72	.83	.72
Task 4, Course Content	.72	.67	.85
Task 5, Teaching Methodology	.52	.55	.89
Task 6, Classroom Organization	.45	.50	.93
Task 7, Student Evaluation	.41	.61	.75
Task 8, Grading and Promotion	.79	.81	.82
Task 9, Student Discipline	.54	.59	.50
Task 10, Student Accounting	.61	.43	.62
Task 11, Extra-Curricular Activities	.71	.54	.76
Task 12, Parent Relationships	.39	.50	.66

* Significant at .05 level.

** Significant at .20 level.

All others were significant at .01 level.

of Task Topics 4, 5, 6 and 7 which relate directly to instruction, may lie in the fact that teachers had more freedom to make their own decisions on these topics than on the other topics in this set. Relatively few decisions relating to Task Topics 4, 5, 6 and 7 made by Administrators and Coordinators were binding on teachers. Realizing this, teachers may have nominated on the attributed influence dimension those members on whom they could rely directly, and who were readily accessible.

To determine the relationship among the twelve sets of ranks for each dimension, Kendall's coefficient of concordance W (8, p. 229-238) was calculated for each of the communication, reliance and attributed influence dimensions across the rankings on these dimensions for all Task Topics. The results are reported in Table X (p. 129). To test the significance of each of these coefficients, each W was converted to a χ^2 statistic (8, p. 236). As indicated in Table X, these χ^2 's were all significant at the .01 level, and it is concluded that despite the differences in the rankings of individual members on the same dimensions of different Task Topics reported in Tables IV, V, VI, and VII, and subsequently discussed, the sets of ranks assigned to individual members on the communication dimensions of all Task Topics were significantly related, as were the sets of ranks assigned to individual members on the reliance and attributed influence dimensions.

TABLE X
COEFFICIENTS OF CONCORDANCE OF DIMENSIONS
AMONG 12 TASK TOPICS

Dimensions	W	χ^2
Communications	.378	204.12*
Reliance	.490	264.60*
Attributed Influence	.520	280.50*
N = 46		
k = 12		

*Significant at .01 level.

Sub-Problem 1.0—Hypotheses

Hypothesis 1.1. The data reported in Tables IV, V, VI, and VII, and discussed previously under each Task Topic and under the Summary of Communication, Reliance and Attributed Influence on 12 Task Topics, revealed that the Principal was the only administrator classified as an influential on all twelve Task Topics. The Vice-Principal was classified as an influential on eight, while the Assistant Superintendent was classified as an influential on only one of the twelve Task Topics. Neither the Superintendent nor the Director were classified as influentials on any of the Task Topics. Therefore the hypothesis that those members classified as administrators would be highly influential on each Task Topic could not be supported.

Hypothesis 1.2. To inspect the relationship of coordinating personnel with those members whose performance they were responsible

for coordinating, the data of Tables IV, V, VI, and VII were reorganized according to the responsibilities of the coordinating personnel, and appear in Appendix C (p. 299). For the data reported in Appendix C, the ranks assigned to members for each Task Topic relate to the system as a whole. However, members may be ordered within department groups on the basis of these ranks, and classified as influentials of the group if they rank in the upper quartile of the group on each dimension of each Task Topic. The data given in Appendix C (p. 299) is restricted to Task Topics 1 to 8 as coordinators responsibilities did not extend to Task Topics 9 to 12.

In interpreting this data, it must be made clear that the ranks assigned to members relate to interactions between members in the system as a whole, while the classification of influentials relates only to the members within each department. Therefore, in this section a member may be classified as an influential in relation to the other members of the same department, but would not be classified as an influential in relation to all members in the system.

Although the Principal taught one English course, and was therefore in a sense a member of the English Department, and the Vice-Principal taught one Biology course and was therefore in a sense a member of the Science Department, the rankings of these two members were based upon interactions which clearly did not pertain to the functioning of any single department. Therefore, these two members were not included as members of departments.

In functioning as an advisory cabinet to the Principal,

Department Heads interacted with each other, and this interaction was reflected in the ranks assigned to these members. A further complication is that some teachers were members of more than one department, are reported in Appendix C in more than one department, and therefore the rankings assigned to these members reflect interactions pertaining to more than one department.

Recognizing these restrictions, it was still considered to be fruitful to examine the rankings of members relative to other members in the same department.

With ten members in the English Department, two members could be classified as being influentials. Clearly, member 11, the Department Head appeared to be the most influential member of the Department, ranking first on each dimension of each Task Topic. Member 39 was classified as an influential on Task Topic 4, otherwise, no other member could be classified as an influential. From this data, it would appear that members 11, 39 and 45 were the most influential members of this department.

As there were six members of the Social Studies Department, only one member could be classified as an influential. Member 12, the Department Head ranked first on each dimension of Task Topics 1, 2, 3 and 7, and appeared to be the most influential member on Task Topic 8. It is interesting to note that on Task Topics 4, course content and 5, teaching methodology, which relate directly to instruction, member 33 ranked first on each dimension. An influential could not be designated on Task Topic 6, classroom organization. It would appear

that members 12 and 33 were the most influential members of this department.

In the Mathematics Department, member 13, the Department Head, ranked first on each dimension of each Task Topic. There appeared to be no other outstanding member of this department.

In the Science Department, member 14, the Department Head, was classified as an influential on Task Topics 1, 3, 7 and 8, ranked first on the reliance and attributed influence dimensions on Task Topics 4, 5 and 6, and first on the communication and attributed influence dimensions of Task Topic 2. The Science Supervisor ranked first on the reliance dimension of Task Topic 2, instructional facilities, but did not rank highly on any other dimension of any other Task Topic. There appeared to be no other outstanding member of this department.

In the French Department, member 15, the Department Head, ranked first on each dimension of Task Topics 1, 3, 6, 7 and 8, ranked first on the reliance and attributed influence dimensions of Task Topics 4 and 5, and first on the communication and attributed influence dimensions of Task Topic 2. The French Supervisor ranked first on the reliance dimension of Task Topic 2, instructional facilities, but did not rank highly on any other dimension of any other Task Topic. There appeared to be no other outstanding member of this department.

In the Commerce Department, member 16, the Department Head, was classified as an influential on Task Topics 2, 3 and 8 and ranked first on the reliance and attributed influence dimensions of Task Topics 1,

4, 5, 6 and 7. Member 23, who ranked first on the communications dimension of Task Topics 4, 5, 6 and 7 was also a member of the English Department.

Among members of the Physical Education Department, member 17, the Department Head, was classified as an influential on Task Topic 2. Influentials could not be designated on any other Task Topic. The Department Head ranked first on the communication dimension of Task Topics 1, 2 and 8, first on the reliance dimension of Task Topics 2, 3, 5, 6 and 7, and first on the attributed influence dimension of Task Topics 1, 2, 3, 6 and 8. He appeared to be the most influential member of this department in terms of these eight Task Topics. Member 36, who was also a member of the English and Social Studies Departments ranked first on the communication dimension of Task Topics 3, 4, 5, 6 and 7.

Although the Industrial Arts teachers did not form a department, the two Industrial Arts teachers and the Chief Industrial Arts Teacher were examined in relation to each other. It is interesting to note that although the role of the Chief Industrial Arts Teacher was defined as acting primarily as an advisor to the Administrative Committee of the Board on the selection and purchase of supplies and equipment for Industrial Arts instruction (p. 76), he ranked higher than the two Industrial Arts teachers on the reliance dimensions of Task Topics 1, 2, 3, 5 and 7, on the communications dimensions of Task

Topics 4 and 5, and on the attributed influence dimensions of Task Topics 2 and 3. The differences between the two Industrial Arts teachers seemed to be quite small.

In summary, all Department Heads were not classified as influentials within their departments on all Task Topics, although Department Heads generally seemed to be highly influential. The Science and French Supervisors generally seemed to be not influential, ranking high on the reliance dimension of Task Topic 2 only. The Chief Industrial Arts Teacher ranked highly on a number of dimensions of a number of Task Topics, but could not be classified as an influential on any Task Topic. With these data there was no means of making judgments concerning the Chief Librarian or the Special Counsellor. From the evidence reported, the hypothesis that coordinating personnel would be influential within the sphere of their responsibilities could not be supported.

Hypothesis 1.3. The Data reported in Table XI (p. 135) reveal that no teachers were classified as influentials on Task Topics 2, instructional facilities, 3, teaching assignments, and 7, student evaluation. Discussion pertaining to influentials has been made in earlier sections under the headings of each Task Topic.

In an attempt to test the statistical significance of the differences in the number of teachers classified as influentials on each Task Topic, the definition of an influential was modified from ranking in the upper quartile on each dimension of a Task Topic, to ranking above the median on each dimension of a Task Topic. The

TABLE XI
MEMBERS CLASSIFIED AS INFLUENTIALS
ON
TASK TOPICS 1 TO 12

Task Topics	Members	No. of Teachers
Task 1, Scheduling	4, 5, 11, 13, 14, 19, 20	2
Task 2, Instructional Facilities	4, 5, 14	0
Task 3, Teaching Assignments	4, 5, 11, 12, 13, 14, 15, 16, 17	0
Task 4, Course Content	4, 11, 18, 33, 39, 44	4
Task 5, Teaching Methodology	4, 11, 33, 39, 45	3
Task 6, Classroom Organization	4, 11, 18	1
Task 7, Student Evaluation	4, 11, 12, 13, 14, 17	0
Task 8, Grading and Promotion	4, 5, 11, 12, 13, 14, 15, 19	1
Task 9, Student Discipline	4, 5, 19, 20	2
Task 10, Student Accounting	2, 4, 5, 19, 20	2
Task 11, Extra-Curricular Activities	4, 5, 17, 19, 20, 32, 36, 37, 41	6
Task 12, Parent Relationships	4, 5, 11, 13, 19, 20	2

NOTE: Members numbered 18 and above are teachers.

number of teachers classified as influentials under the modified definition are reported in Table XII (p. 136). To test for overall differences among the number of teachers classified as influentials on 12 Task Topics, the Cockran Q test for k related samples was calculated. The Cockran Q test for k related samples provides a method

TABLE XII
OVERALL DIFFERENCES AMONG NUMBERS OF INFLUENTIAL TEACHERS
ON 12 TASK TOPICS

Number of Influential Teachers, Modified Classification: (a)

Task 1, Scheduling	- 2
Task 2, Instructional Facilities	- 1
Task 3, Teaching Assignments	- 1
Task 4, Course Content	- 6
Task 5, Teaching Methodology	- 7
Task 6, Classroom organization	- 11
Task 7, Student Evaluation	- 8
Task 8, Grading and Promotion	- 4
Task 9, Student Discipline	- 3
Task 10, Student Accounting	- 4
Task 11, Extra-Curricular Activities	- 6
Task 12, Parent Relationships	- 3

$$Q = 31.3396$$

$$df = k-1 = 11$$

$$\chi^2 .999 (df 11) = 31.26$$

(a) For details of modification of classification see p. 135 and p. 137

for testing whether three or more matched sets of frequencies or proportions differ significantly among themselves. This test is particularly suitable when the data are in a nominal scale, or are dichotomized ordinal information as is the case with these data. (8, p. 161). As the sampling distribution of Q is approximated by the chi-square distribution with $k-1$ degrees of freedom (8, p. 162), the significance of the Q statistic was tested by means of a chi-square table. The results reported in Table XII (p. 136), indicate that the differences among the number of teachers classified as influentials on 12 Task Topics were significant at the .001 level, indicating that significantly more teachers were influential on some Task Topics than on others. Because of the restrictions imposed by the small number of influentials on some Task Topics, and the data being of a repeated measures nature, tests of significance of differences between all possible pairs of Task Topics were not carried out. Regardless of these tests, inspection of the data reported in Table XI and Table XII revealed that the hypothesis could not be supported because of the number of teachers classified as influentials on Task Topic 11 in Table XI, and on Task Topics 7 and 11 in Table XII.

On the basis of the evidence presented, the hypothesis that more teachers would be influential on Task Topics 4, 5, and 6 than on the remainder of the Task Topics could not be supported.

Hypothesis 1.4. This hypothesis was related to Hypothesis 1.3, and was made because the classification of influentials allowed for the maximum of eleven members to be classified as influentials on each

Task Topic, and because the classification of personnel as administrators, coordinators and teachers resulted in there being seventeen members classified as administrators and coordinators. Therefore, if all administrators and all coordinators were highly influential on each Task Topic, no teacher could be classified as an influential. Therefore it was reasonable to assume that few teachers would be classified as influentials on any Task Topic.

On the basis of the data reported in Table XI (p. 135), the hypothesis that some teachers would be influential on Task Topics 4, 5 and 6 was supported.

Hypothesis 1.5. Data concerning teachers' perceptions of their present degree of influence on each Task Topic were solicited during the personal interview by means of a six point scale ranging from (1) very highly influential, to (6) not influential at all (Appendix B, p. 293). Means for each Task Topic were computed and are reported in Table XIII (p. 139). To test for overall differences among the means on the twelve Task Topics, an analysis of variance for repeated measures (9, p. 112) was calculated. The summary of the analysis of variance reported in Table XIII (p. 139), reveals that the differences among means on the twelve Task Topics were significant at the .01 level. To test for significant differences between all possible pairs of means, a Newman-Keuls test (9, p. 114) was calculated and is reported in Table XIII. The data in this table reveal that teachers felt they had significantly more influence on Task Topics 5, teaching methodology, and 6, classroom organization, than on any other Task Topics.

TABLE XIII

TEACHERS' PERCEIVED DEGREE OF INFLUENCE ON 12 TASK TOPICS

SUMMARY OF ANALYSIS OF VARIANCE:

Source of Deviation	SS	df	MS	F
Between members	175.92	(n-1) 28		
Within members	417.25	n(k-1) 319		
Tasks	230.86	(k-1) 11	20.99	34.41
Residual	186.39	(n-1) (k-1) 308	.61	
Total	593.17	(kn-1) 347		

$$F_{.99} (11, 308) = 2.25$$

$$n = 29 \quad k = 12$$

SUMMARY OF NEWMAN-KEULS TEST FOR DIFFERENCES BETWEEN MEANS:

Means	2.17	2.17	2.72	2.83	3.00	3.24	3.45	3.72	3.83	4.17	4.52	4.76
Tasks	5	6	4	9	7	8	2	10	11	12	3	1
5			**	*	*	*	*	*	*	*	*	*
6			**	*	*	*	*	*	*	*	*	*
4							*	*	*	*	*	*
9							**	*	*	*	*	*
7								**	*	*	*	*
8										*	*	*
2										**	*	*
10											*	*
11											**	*
12												
3												
1												

* Significant at .01 level.

** Significant at .05 level.

Teachers felt they had the least influence on Task Topics 1, scheduling, 3, teaching assignments and 12, parent relationships, with the degrees of influence on these three Task Topics being not significantly different.

Data concerning the degree of influence teachers would desire to have on each Task Topic were solicited during the personal interview by means of a six point scale ranging from (1) very highly influential, to (6) not influential at all (Appendix B, p. 293). Means for each Task Topic were computed and are reported in Table XIV (p. 141). To test for overall differences among the means on the twelve Task Topics, an analysis of variance for repeated measures (9, p. 112) was calculated. The summary of the analysis of variance reported in Table XIV (p. 141) revealed that the differences among means on the twelve Task Topics were significant at the .01 level. To test for significant differences between all possible pairs of means, a Newman-Keuls test (9, p. 114) was calculated and is reported in Table XIV. The data in this table reveal that teachers desired significantly more influence on Task Topics 4, course content, 5, teaching methodology and 6, classroom organization, than on any other Task Topic. Concerning the Task Topics on which the least influence was desired, there was no significant difference among the degrees of influence desired on Task Topics 1, scheduling, 3, teaching assignments, 10 student accounting, 11, extra-curricular activities and 12, parent relationships.

To deal with the hypothesis, tests for the significance of the

TABLE XIV

TEACHERS' DESIRED DEGREE OF INFLUENCE ON 12 TASK TOPICS

SUMMARY OF ANALYSIS OF VARIANCE:

Source of Deviation	SS	df	MS	F
Between members	154.11	(n-1) 28		
Within members	525.33	n(k-1) 319		
Tasks	212.34	(k-1) 11	19.30	18.92
Residual	312.99	(n-1)(k-1) 308	1.02	
Total	679.44	(kn-1) 347		

F.99 (11, 308) = 2.25
n= 29 k= 12

SUMMARY OF NEWMAN-KEULS TEST FOR DIFFERENCES BETWEEN MEANS:

Means	1.79	1.83	2.24	2.66	2.79	2.83	3.21	3.45	3.76	3.79	4.00	4.14
Tasks	5	6	4	2	7	9	8	10	11	3	1	12
5				*	*	*	*	*	*	*	*	*
6				*	*	*	*	*	*	*	*	*
4							*	*	*	*	*	*
2									*	*	*	*
7									*	*	*	*
9									**	**	*	*
8												**
10												
11												
3												
1												
12												

* Significant at .01 level

** Significant at .05 level

difference between two means for correlated samples (4, p. 138) were carried out between the mean of the perceived degree of influence and the mean of the desired degree of influence for each Task Topic. According to the results reported in Table XV, (p. 142), teachers desired significantly more influence on Task Topics 1, 2, 3, 4, 5, 6, 7 and 10. Teachers did not desire more influence on Task Topics 8, 9, 11 and 12. On no Task Topic did teachers desire less influence than they felt they presently had.

According to the data reported in Table XV, the hypothesis that teachers would desire to have a greater opportunity to be influential on each Task Topic could not be supported.

TABLE XV

DIFFERENCE BETWEEN MEANS OF TEACHERS' PERCEIVED DEGREE OF
INFLUENCE AND TEACHERS' DESIRED DEGREE OF
INFLUENCE

Tasks	1	2	3	4	5	6	7	8	9	10	11	12
Means												
Perceived Influence	4.76	3.45	4.52	2.72	2.17	2.17	3.00	3.24	2.83	3.72	3.83	4.17
Desired Influence	4.00	2.66	3.79	2.24	1.79	1.83	2.79	3.21	2.83	3.45	3.76	4.14
Difference	*	*	*	*	*	*	**			*		
n = 29												

* Significant at .01 level

** Significant at .05 level

Hypothesis 1.6. Data concerning teachers' perceptions of the degree to which their professional competence was used in organizational planning related to each Task Topic were solicited during the personal interview by means of a six point scale ranging from (1) to the limit of my competency, to (6) not at all (Appendix B, p. 294). Means for each Task Topic were computed and are reported in Table XVI (p. 144). To test for overall differences among the means on the twelve Task Topics, an analysis of variance for repeated measures (9, p. 112) was calculated. The summary of the analysis of variance reported in Table XVI (p. 144), reveals that the differences among means on the twelve Task Topics were significant at the .01 level. To test for significant differences between all possible pairs of means, a Newman-Keuls test (9, p. 114) was calculated and is reported in Table XVI. The data in this table reveal that teachers perceived their professional competence to be used more on Task Topics 4, course content, 5, teaching methodology, 6, classroom organization, and 9, student discipline, than on any other Task Topics, and that there were no significant differences between these four Task Topics. Teachers perceived their professional competence to be used least on Task Topics 1, scheduling and 3, teaching assignments.

The criteria for the extent to which well developed lines of communication existed was the number of reciprocated communication links between teachers and coordinators and administrators for each Task Topic. These data were obtained from the original matrices of the communication dimensions for each Task Topic and are reported in

TABLE XVI

TEACHERS' PERCEPTIONS OF THEIR USE OF PROFESSIONAL
COMPETENCE ON 12 TASK TOPICS

SUMMARY OF ANALYSIS OF VARIANCE:

Source of Deviation	SS	df		MS	F
Between members	151.73	(n-1)	28		
Within members	596.42	n(k-1)	319		
Tasks	309.39	(k-1)	11	28.13	30.25
Residual	287.03	(n-1) (k-1)	308		
Total	748.15	(kn-1)	347		

F_{.99} (11, 308) = 2.25
n = 29 k = 12

SUMMARY OF NEWMAN-KEULS TEST FOR DIFFERENCES BETWEEN MEANS:

Means	1.83	2.07	2.41	2.45	2.76	2.93	3.48	3.59	3.72	4.03	4.69	4.83
Tasks	5	6	4	9	7	8	2	11	10	12	3	1
5					*	*	*	*	*	*	*	*
6						*	*	*	*	*	*	*
4							*	*	*	*	*	*
9							*	*	*	*	*	*
7								**	*	*	*	*
8									**	*	*	*
2											*	*
11											*	*
10											*	*
12												
3												
1												

* Significant at .01 level

** Significant at .05 level

Table XVII (p. 146).

To test the hypothesis, each Task Topic was ranked according to the mean of teachers' perceptions of the use of their own competence, each Task Topic was ranked according to the number of reciprocated communication links between teachers and coordinators and administrators, and a Spearman rank correlation coefficient computed and tested for significance according to Seigel (8, p. 207). The data reported in Table XVII (p. 146) reveal that there was a significant relationship between these two variables. The hypothesis that there would be a relationship between the extent the professional competence of teachers was used in organizational planning, and the extent that well developed lines of communication between teachers and coordinators and administrators were found to exist was supported.

Hypothesis 1.7. The variables of age, amount of professional experience, amount of professional training, and amount of professional experience in this school were measured in terms of years and are reported in Table III (p. 70). Members were dichotomized in terms of their relative amount of influence on each Task Topic as being influentials or not. For each Task Topic, members ranking in the upper quartile on each of the three dimensions, communication, reliance, and attributed influence, were classified as being influentials on that particular Task Topic. Members not ranking in the upper quartile on each dimension of a Task Topic were classified as being non-influentials (p. 96). The members classified as influentials on each Task Topic are reported in Table XI (p. 135). To test the

TABLE XVII

RELATIONSHIP BETWEEN TEACHERS' PERCEIVED USE OF PROFESSIONAL
COMPETENCE AND COMMUNICATION LINKS BETWEEN TEACHERS,
AND
COORDINATORS AND ADMINISTRATORS

Task Topics	Use of Competence		Communication Links	
	<u>Means</u>	<u>Rank</u>	<u>Number</u>	<u>Rank</u>
Task 5, Teaching Methodology	1.83	1	23	5
Task 6, Classroom Organization	2.07	2	21	7
Task 4, Course Content	2.41	3	36	1
Task 9, Student Discipline	2.45	4	23	5
Task 7, Student Evaluation	2.76	5	23	5
Task 8, Grading and Promotion	2.93	6	27	3
Task 2, Instructional Facilities	3.48	7	28	2
Task 11, Extra-Curricular Activities	3.59	8	6	9.5
Task 10, Student Accounting	3.72	9	4	11
Task 12, Parent Relationships	4.03	10	18	8
Task 3, Teaching Assignments	4.69	11	3	12
Task 1, Scheduling	4.83	12	6	9.5

$$r_s = .657$$

$$t = 2.756$$

$$t_{.01 (10)} = 3.169$$

$$t_{.05 (10)} = 2.228$$

hypothesis, point biserial correlation coefficients (4, p. 199) were calculated between each of the four variables measured in years, and the dichotomized amount of influence variable, for each Task Topic, and are reported in Table XVIII (p. 148). On the variable concerning the amount of professional experience within this school, the n was reduced from 46 to 38, as this variable could not be related to the eight members of the system who were not members of the school staff. The data reported in Table XVIII reveal no significant relationships between age and amount of influence, or between amount of professional experience and amount of influence. Significant relationships were found between the amount of professional experience within this school and the amount of influence on Task Topics 3, teaching assignments and 8, grading and promotion.

Reference to Table XI (p. 135) reveals that the influential members on Task Topic 8 were the Principal, Vice-Principal, five Department Heads and the female counsellor. Reference to Table III (p. 70) reveals the relatively long service within this school of the Vice-Principal and four of the Department Heads.

Significant relationships were found between the amount of professional training and the amount of influence, on all Task Topics. In interpreting these relationships, attention should be drawn to the constant bias introduced by the fact that the Principal was an influential on all Task Topics, and had more years of training than any other member of the system.

Although significant relationships were found between the

TABLE XVIII

POINT BISERIAL CORRELATION COEFFICIENTS SHOWING RELATIONSHIP
BETWEEN INFLUENTIALS AND AGE, YEARS OF EXPERIENCE, YEARS
OF TRAINING AND YEARS OF EXPERIENCE IN THIS SCHOOL

Task Topics	Age	Experience	Training	Experience in this School
1, Scheduling	.012	.040	.359*	.229
2, Instructional Facilities	.013	.017	.337*	.066
3, Teaching Assignments	.202	.139	.419*	.408*
4, Course Content	.104	.099	.328**	.185
5, Teaching Methodology	.010	.008	.388*	.063
6, Classroom Organization	.167	.242	.337*	.235
7, Student Evaluation	.032	.106	.411*	.185
8, Grading and Promotion	.157	.119	.390*	.291**
9, Student Discipline	.058	.076	.362*	.083
10, Student Accounting	.107	.156	.388*	.083
11, Extra-Curricular Activities	.183	.114	.279**	.051
12, Parent Relationships	.109	.122	.411*	.255
	n=46	n=46	n=46	n=38

* Significant at .01 level

** Significant at .05 level

amount of professional training and the amount of influence, on all Task Topics, the original hypothesis that there would be a relationship between the relative amount of influence accruing to members, and the following characteristics of members: age, amount of professional training, amount of professional experience and amount of experience within the organization, could not be supported.

Summary of Hypotheses Under Sub-Problem 1.0

Hypothesis 1.1, that those members classified as administrators would be highly influential on each Task Topic was not supported. The Principal was the only administrator classified as an influential on all twelve Task Topics. The Vice-Principal was classified as an influential on eight of the twelve Task Topics. The Assistant Superintendent was classified as an influential on only one of the twelve Task Topics. Neither the Superintendent nor the Director were classified as influentials on any of the Task Topics.

Hypothesis 1.2, that coordinating personnel would be influential within the sphere of their responsibilities was not supported. Even when the data from the main analysis were reorganized according to the responsibilities of coordinating personnel, Department Heads were not classified as being influentials in relation to other members of their departments on all Task Topics related to their responsibilities. Neither in the main analysis, nor when the data were reorganized according to the responsibilities of the coordinating personnel were the Chief Industrial Arts Teacher, the French Supervisor or the Science Supervisor classified

as influentials on any Task Topic. Neither the Chief Librarian nor the Special Counsellor were classified as influentials on any Task Topic.

Hypothesis 1.3, that more teachers would be influential on Task Topics 4, 5 and 6 than on the remainder of the Task Topics was not supported. Teachers appeared to be more influential on Task Topics 4, course content, 5, teaching methodology, 6, classroom organization, 7, student evaluation and 11, extra-curricular activities, than on the remainder of the Task Topics.

Hypothesis 1.4, that some teachers would be influential on Task Topics 4, 5 and 6 was supported.

Hypothesis 1.5, that teachers would desire to have a greater opportunity to be influential on each Task Topic was not supported. Teachers did not desire more influence on Task Topics 8, grading and promotion, 9, student discipline, 11, extra-curricular activities and 12, parent relationships.

Hypothesis 1.6, that there would be a relationship between the extent the professional competence of teachers was used in organizational planning and the extent that well developed lines of communication between teachers, and coordinators and administrators, were found to exist was supported.

Hypothesis 1.7, that there would be a relationship between the relative amount of influence accruing to members, and the following characteristics of members: age, amount of professional training, amount of professional experience, and amount of experience within the

organization, was not supported. However, a significant relationship was found between the amount of influence accruing to members and the amount of professional training of members.

BIBLIOGRAPHY, CHAPTER V

- (1) Blocker, C. E. and R. H. McCabe, Relationships Between the Informal Organization and the Curriculum in Six Junior Colleges, (Austin, Texas, 1964).
- (2) Blocker, C. E., R. H. McCabe, and A. J. Prendergast, A Method for the Sociometric Analysis of the Informal Organization Within Large Work Groups, (Austin, Texas, 1964).
- (3) Bronfenbrenner, U., "A Constant Frame of Reference for Sociometric Research: II Experiment and Influence," Sociometry, VII, August, 1964, pp. 283-289.
- (4) Ferguson, G. A., Statistical Analysis in Psychology and Education, (Toronto, McGraw-Hill Book Co., 1959).
- (5) Garrett, H. E., Statistics in Psychology and Education, (Toronto, Longmans, Green and Co., 1958).
- (6) Jennings, H. H., "The Significance of Choice in Human Behaviour," in D. Cartwright and A. Zander, (eds.), Group Dynamics, (Evanston, Illinois, Row, Peterson and Company, 1960,) pp. 62-69.
- (7) Moreno, J. L., Who Shall Survive, (New York, Beaver House, Inc., 1953).
- (8) Seigel, S., Nonparametric Statistics for the Behavioural Sciences, (Toronto, McGraw-Hill Book Co., 1956).
- (9) Winer, B. J., Statistical Principles in Experimental Design, (Toronto, McGraw-Hill Book Co., 1956).

CHAPTER VI

ANALYSIS OF THE DATA: SUB-PROBLEM 2.0

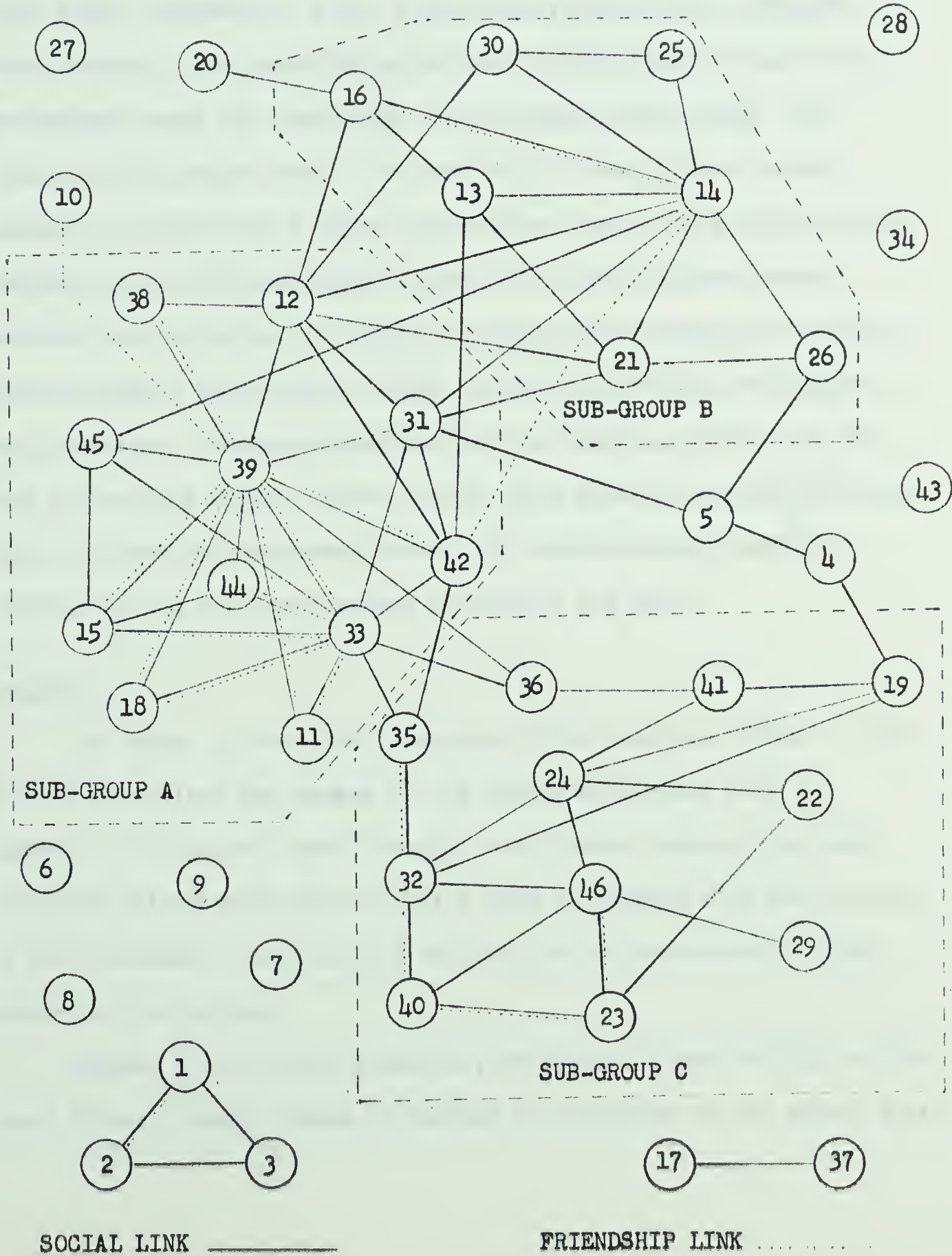
Sub-problem 2.0 was stated in the form of the question: What is the relationship of the informal primary groups in the organization to the influence structures existing within the organization? The analysis of the data concerning this sub-problem and the hypothesis related to this sub-problem will be reported in this chapter. The data diagrammed in Figure III (p. 153) reveal all of the reciprocated social relationships and all of the reciprocated friendship relationships in the system under study. In this context, friendship differed from social relationship in the degree of the intensity of the relationship (Appendix B, p. 290). These relationships were voluntary relationships, which it was assumed were formed to fulfill individual social needs, as distinct from relationships which formed because the activities of the members in the functional processes of the organization were related and interdependent. Following the procedure used with the data of the communication dimensions (p. 91), social and friendship relationships were verified by considering only reciprocated choices.

Restrictions on the Formation of Social Relationships

There were physical and organizational variables which tended to restrict the formation of social relationships. Eight members of the system under study were not members of the school staff and had

FIGURE III

RECIPROCATED SOCIAL AND FRIENDSHIP RELATIONSHIPS



little opportunity for social interaction with the members of the school staff. Members 1, 2, 3, 9 and 10 functioned largely in the Board office, and had duties which were not restricted to the school under study. Members 6, 7 and 8 functioned half-time as teachers in other schools. The coordinating duties to which half of their time was devoted, were not restricted to the school under study. For members of the school staff, the periods of time prior to school opening, at noonhour and after instructional hours were restricted by teachers' work with individual students outside of class hours, teachers' participation in extra-curricular activities with students, general student supervision duties, subject department meetings and staff meetings. Although teachers had one teaching period each day free of teaching duties, these periods were fixed by the yearly timetable, so that the same small number of teachers were freed from teaching during the same periods throughout the year.

Isolates

As member 6, the Chief Industrial Arts Teacher, member 7, the Science Supervisor and member 8, the French Supervisor were not members of the school staff, taught in different schools, and had divergent duties which did not bring them in contact with each other, it was reasonable that they had no social relationships with other members of the system.

Member 9, the Chief Librarian, functioned almost wholly at the Board Office, rarely coming in contact with members of the school staff.

Her duties rarely brought her in contact with members 1, 2, 3 and 10 who were also located in the Board Offices.

Member 10, the Special Counsellor, was located at the Board Offices, but spent most of his working time outside of the Board Offices visiting schools, parents, or the Health Clinic. As reported in Chapter IV (p. 78), he rarely had contact with members of the school under study.

Of the members of the school staff, members 27, 28, 34 and 43 were classified as social isolates. These four members were all in their first year as members of this school staff. Members 28 and 34 were Industrial Arts teachers, who reported that because of the nature of their work they were confined largely to their shops. They rarely got to the staff room, but when they did, they socialized with anyone who happened to be there. While member 28 received two social nominations, and member 34 received four social nominations, neither member indicated a social link with anyone in the system. Member 27 was a member of the English Department in his first year of teaching. Member 34 taught Science and Home Economics and was in her first year in this province. While member 27 received two social nominations, and member 43 received four social nominations, neither members indicated a social link with anyone in the system. Both of these members reported they socialized with anyone in the school in whose company they happened to be, but did not feel they socialized with any particular members more than others.

None of the members classified as isolates had any reciprocated

friendship relationships with other members of the system.

Social Groups

In relation to the system under study, members 1, 2 and 3 formed a separate social group. These members occupied adjacent offices, worked very closely together, were all members of the Executive Committee of the Board, attended all Board meetings, often met for luncheon, and shared coffee breaks. Members 1 and 2 reported they had worked together in other school districts, and had been mutual friends for a period of almost twenty years.

Members 17 and 37 were linked socially but had no reciprocated social links with other members of the system and appeared to form a small separate social group. Member 17 was the Head of the Physical Education Department, and taught only Physical Education. Member 37 taught Physical Education and one class of Social Studies. He reported that as the Social Studies course he taught was not a university entrance program course, he was left largely to his own devices in teaching this course, and rarely attended Social Studies Departmental meetings. Both of these members reported that because of their involvement in extra-curricular activities before school hours, at noonhour, and after instructional hours, they rarely visited the staff room at these times, but when they did, they socialized with anyone who happened to be there. Although both members indicated they socialized only with each other, both received five social nominations from other members.

In the main pattern of social relationships, 32 of the 46 members of the system, or 32 of the 38 members of the school staff were linked together. Although there appeared to be no well defined cliques or sub-groups within this pattern, there appeared to be three ill-defined and interconnected sub-groups. The first of these, labelled sub-group A in Figure III (p. 154), was composed largely of English and Social Studies teachers linked to members 33 and 39. The second, labelled sub-group B in Figure III, was composed of Science, Mathematics and Commerce teachers centred around member 14. The third, labelled sub-group C in Figure III, was composed almost entirely of female teachers. Eleven of the thirteen female members of the staff were in this group. Several female members reported that over a period of time rather well defined seating arrangements had developed at the luncheon tables in the staff room, that the male and female members generally did not share the same tables, and that these arrangements restricted the development of social relationships between male and female members.

Centres of Social Interaction

Member 33 and member 39 were interconnected, and were each centres of social interaction. These two members were classified as influentials on Task Topics 4 and 5, ranked relatively high on Task Topic 6 (Table V, p. 101), and were actively involved with the library centred teaching innovation. Of the five members intimately involved

in the library centred teaching innovation, members 33 and 39 were linked, and members 18, 42 and 44 were each linked to members 33 and 39. Of the three members involved in the teaching innovation to a lesser extent, members 11 and 45 were each linked to members 33 and 39, while member 12 was linked to member 39. Members 11, 18 and 44 had friendship links with members 33 and 39, who were linked, and member 42 had a friendship link with member 39. The cohesiveness of this group, apparent in the communications, reliance and attributed influence dimensions of Task Topics 4, 5 and 6, extended to social relationships, and in large part to friendship relationships. Member 33 and member 39 had more friendship links than any other members of the system.

Although three rather ill-defined groups were found in the main pattern of social relationships, and although the group of teachers involved in the teaching innovation were closely linked in social relationships, the social interactions generally did not seem to be based on mutual work interests, nor did the Department Heads form a social clique.

The English Department Head, member 11, who was classified as an influential on Task Topics 1, 3, 4, 5, 6, 7, 8 and 12, and who had a close working relationship with the Principal, had only two social links, members 33 and 39, with whom he also had friendship links. He had no social link with any other Department Head, and had a social link with only one member of his department, member 39.

The Social Studies Department Head, member 12, seemed to be a

centre of social interaction, had social links with Department Heads 14 and 16, but had a social link with only one member of his department, member 38. It is interesting to note that although he participated in the library centred teaching innovation, and had social links with two other members of that group, members 39 and 42, he had no social links with the two members of his department who were actively engaged with the innovation, members 33 and 44.

The Mathematics Department Head, member 13, had social links with Department Heads 14 and 16, but had no social links with any member of his department. The cohesiveness of the members of this department, apparent in the reliance links on Task Topics 2 and 3, did not extend to social relationships.

The Science Department Head, member 14, was a centre of social interaction, had social links with Department Heads 12, 13 and 16, and had social links with the two male members of his department, members 25 and 30. The friendship link between member 14 and member 42 of the English Department was interesting as there was no social link between these two members. Apparently the friendship relationship existed outside of the school, but they did not interact socially within the school.

The French Department Head, member 15, had no social links with other Department Heads, or with members of his department. Socially he was linked with four members of the group active in the library centred teaching innovation, and had friendship links with members 33 and 39.

The Commerce Department Head, member 16 had social links with Department Heads 12 and 13 and both social and friendship links with 14, but had no social links with members of his department.

The Physical Education Department Head, member 17, has been discussed previously.

Members 24 and 46, who ranked relatively low on all dimensions of all Task Topics, and member 31, who ranked relatively high on the communication dimension of Task Topics 4, 5, 6 and 7, but did not rank high on any other dimensions of any other Task Topics, were well integrated socially.

The Principal, member 4, reported that he tried not to form close social relationships with members of his staff other than the Vice-Principal. However, during this year, he had spent quite a bit of time with the female counsellor, member 19, as he admired her talents as a counsellor. As this was her first year in the school, he was anxious to have her integrated into the system as quickly as possible. The Principal was linked socially with the Vice-Principal, member 5.

The male counsellor, member 20 had only one reciprocated social link, with member 16. He reported that he socialized with everyone, but with no one in particular with the exception of member 16. Member 20 received 7 social nominations.

Member 29, of the English and French Departments also reported that he socialized with almost every member of the staff. However, he received only two social nominations, one of which was reciprocated,

with member 46, who also taught French.

Hypothesis 2.1

In the perception of any member, the practices of the organization result from the influence of those members perceived to be influentials. Therefore, it is argued that measures of the satisfaction of a member with the direction of the influence of those members perceived to be influentials on any given Task Topic, would be measures of the satisfaction of the member with the organizational practices relating to that Task Topic. To measure the degree of satisfaction of each member with organizational practices, each member was asked to indicate on a six point scale ranging from (1) very satisfied to (6) very dissatisfied, the degree of satisfaction or dissatisfaction with the direction of influence of the persons nominated by the member on the attributed influence dimension of each Task Topic (Appendix A, p. 264).

In calculating the means for each Task Topic, members 6, 7, 8, 9 and 10 were omitted, as these members did not respond to all Task Topics protesting a lack of knowledge of the organization. Therefore the n was reduced from 46 to 41. The means for each Task Topic are reported in Table XIX (p. 163).

To test for overall differences among the means on the twelve Task Topics, an analysis of variance for repeated measures (2, p. 112) was calculated. The summary of the analysis of variance reported in Table XIX reveals that the differences among means on the twelve Task

TABLE XIX

MEMBERS' SATISFACTION WITH ORGANIZATIONAL PRACTICES RELATING
TO TWELVE TASK TOPICS

SUMMARY OF ANALYSIS OF VARIANCE:

Source of Deviation	SS	df		MS	F
Between members	171.80	(n-1)	40		
Within members	209.25	n(k-1)	451		
Tasks	19.54	(k-1)	11	1.77	4.12
Residual	189.71	(n-1)	(k-1)	440	.43
Total	381.05	(kn-1)	491		

$$F_{.99}(11, 440) = 2.25$$

$$n = 41 \quad k = 12$$

SUMMARY OF NEWMAN-KEULS TEST FOR DIFFERENCES BETWEEN MEANS:

Means	1.39	1.54	1.54	1.59	1.59	1.68	1.80	1.83	1.83	1.93	1.98	2.07
Tasks	9	10	4	12	5	6	8	7	3	11	1	2
9										*	*	*
10												**
4												**
12												**
5												**
6												
8												
7												
3												
11												
1												
2												

* Significant at .01 level.

** Significant at .05 level.

Topics are significant at the .01 level. To test for significant differences between all possible pairs of means, a Newman-Keuls test (2, p. 114) was calculated and is reported in Table XIX (p. 163). The results of the Newman-Keuls test reveal there were no significant differences between the members' satisfaction with practices relating to Task Topics 3, 4, 5, 6, 7, 8, 9, 10 and 12. The members were significantly less satisfied with practices relating to Task Topic 2 than they were with practices relating to Task Topics 4, 5, 9, 10 and 12, and significantly less satisfied with practices relating to Task Topics 1 and 11 than with practices relating to Task Topic 9. The means reported reveal that members generally were satisfied with the practices of the organization on all Task Topics.

The analysis of the informal structure of the organization revealed one highly integrated social network, and two very small discrete groups. Because of this, no clear meaning could be derived from a test of the hypothesis that the practices desired by the members of an informal structure would tend to be congruent with the practices of the organization, if the influential elites of the organization functioned within the informal structure. Therefore this hypothesis was not tested, and it could be neither supported nor rejected.

Summary

Nine members of the system were classified as social isolates. Two small discrete social groups appeared, one consisting of three members and the other consisting of two members. All other members

of the system formed one highly integrated social network. Social relationships generally did not seem to be based on mutual work interests. No well defined cliques or sub-groups appeared within the main pattern of social relationships. However, there appeared to be three ill-defined and interconnected sub-groups, one composed of teachers of English and Social Studies, one composed of teachers of Mathematics, Science and Commerce, and one composed of female teachers. Because of the nature of the patterns of social relationships, it was considered that no clear meaning could be derived from a test of Hypothesis 2.1. Therefore the hypothesis that the practices desired by the members of an informal structure would tend to be congruent with the practices of the organization, if the influential elites of the organization functioned within the informal structure, was not tested, and could be neither supported nor rejected.

BIBLIOGRAPHY, CHAPTER VI

- (1) Moreno, J. L., Who Shall Survive, (New York, Beaver House, Inc., 1953).
- (2) Winer, B. J., Statistical Principles in Experimental Design, (Toronto, McGraw-Hill Book Co., 1956).

CHAPTER VII

ANALYSIS OF THE DATA: SUB-PROBLEM 3.0

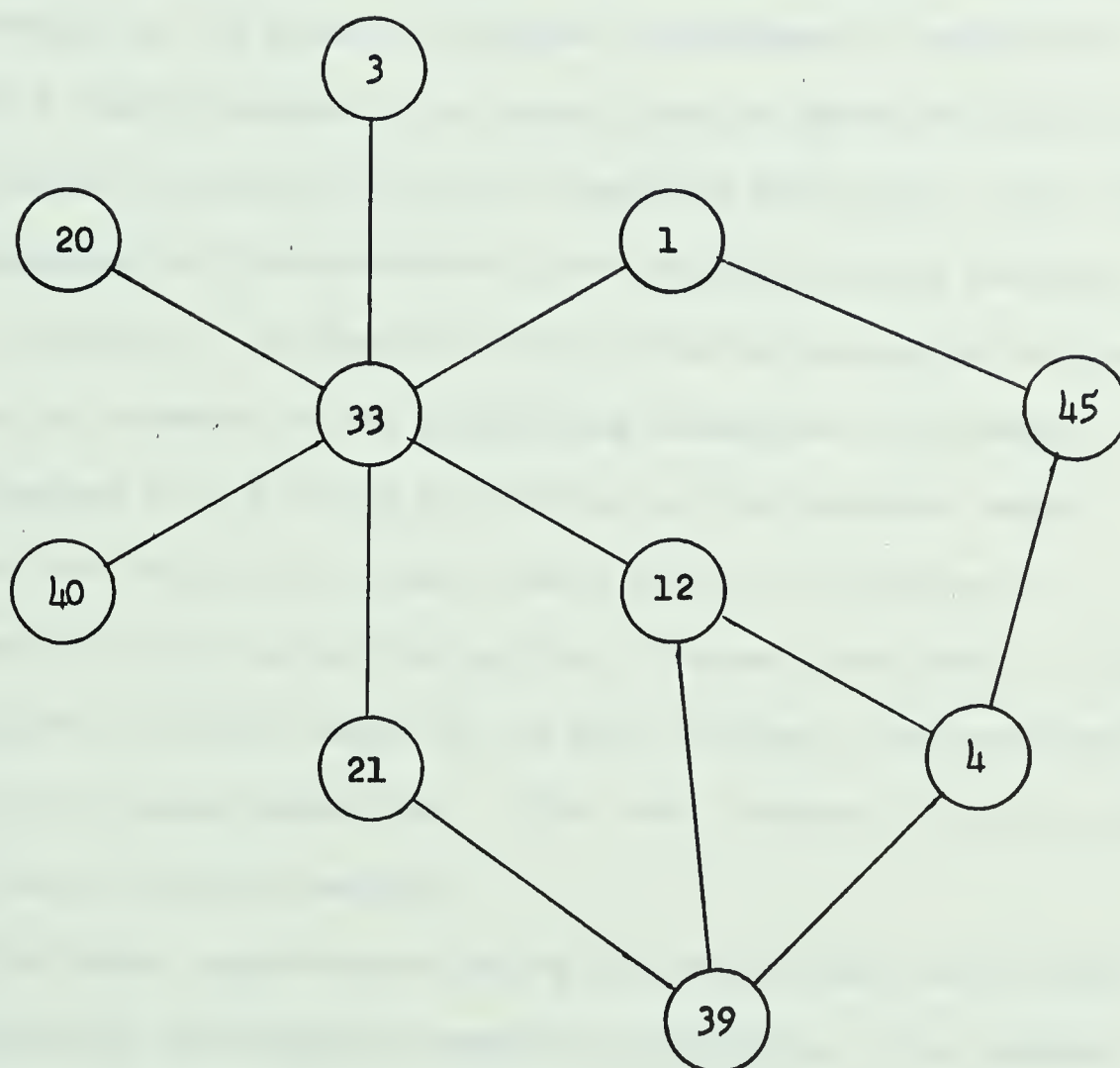
Sub-problem 3.0 was stated in the form: What is the nature of the dyadic modal influence relationships existing within the organization? Reported in this chapter are the conflict relationships existing within the organization, a revision of Schermerhorn's typology of influence relationships, the categorization of influence relationships, and the examination of the two hypotheses related to sub-problem 3.0.

I. CONFLICT RELATIONSHIPS

Diagrammed in Figure IV (p. 168) were all of the conflict relationships reported in the system. Many members reported they had minor disputes with other members of the system, but that these had been quickly resolved with little emotional involvement. The relationships reported here were conflicts in which there was considerable emotional involvement on the part of at least one member of the dispute, and that had not been quickly or easily resolved. This data was gathered by means of Part III of the Questionnaire (Appendix A, p. 288), and Part I of the Personal Interview Schedule (Appendix B, p. 289).

It is interesting to note that of the eight members actively engaged in the library centred teaching innovation, four have been involved in conflict relationships. However, of the twelve conflict

FIGURE V
CONFLICT RELATIONSHIPS



relationships reported, eight were reported as arising from salary negotiations between the teachers and the Board.

As discussed previously in Chapter IV (p. 74) the salaries of all members of this system, with the exception of those classified as administrators, were determined according to a salary schedule negotiated between the Board, and a committee of the local teachers' association. These salary schedules were negotiated annually, each fall, usually in the months of October and November. Legislation required a salary schedule to be established by December 31st, and had provision for conciliation and compulsory arbitration, with the recommendations of the arbitration board binding on both parties (1, sec. 136-141). The Superintendent acted as an advisor to the Board and as a member of the negotiating committee of the Board.

Members 33 and 39 had been active on the teachers' salary committee for the past five years, with member 33 acting as a negotiator for the teachers during four of these five years. Of the six conflicts in which member 33 had been involved, five resulted from his role as a salary negotiator. This year, members 33 and 45 acted as negotiators for the teachers.

The salary negotiations during this school year were bitter and protracted, resulting in compulsory arbitration. The teachers boycotted the arbitration hearings, and stated publicly they would not accept the award of the arbitration board, and would return to the Board that portion of their salary represented by the arbitration award. The teachers also stated publicly that they were seeking

support from the provincial teachers' association to have this school district declared in dispute. This tactic in effect would blacklist the school district, preventing any members of the provincial teachers' association, to which all teachers must belong by legislation (1, Sec. 144-148), from accepting positions in this school district for the following school year. As a result, negotiations were continued through January and February, until a settlement was reached in early March giving the teachers a substantial increase in salary for the following school year. In the course of these negotiations both sides carried the dispute to the public through the local press. One press statement issued by the teachers criticized severely the role played in the negotiations by the Superintendent. This statement resulted in a heated controversy between the Superintendent and members 33 and 45, the negotiators for the teachers, during which all three members reported animosity was displayed. Both sides to the dispute reported there was no longer any hostility between them over this conflict, but each side reported that a feeling of some suspicion and fear toward the other side still existed.

The conflicts between member 33 and members 20, 21 and 40, and between member 39 and 21 arose over the tactics advocated and used by the teachers' salary committee during the negotiations this year. Member 33 reported there was no longer any conflict between himself and members 20, 21 and 40, but that his relationships with members 20 and 21 were still somewhat strained. Member 39 reported the conflict between himself and member 21 had been forgotten but that their

relationship was not as amiable as it was prior to the conflict.

Member 21 reported there was no longer any antagonism between himself and members 33 and 39, but that his relationships with these members were strained, and he tended to avoid them. Member 20 reported there was no longer any antagonism between himself and member 33, but that because of a somewhat strained relationship they rarely came in contact with each other. Member 40 reported that her relationship with member 33 was now quite amiable.

The conflict between member 33 and the Director, member 3, also arose over salary negotiations, and took place four years prior to this study when member 33 was acting as Social Studies Department Head in another secondary school in the district, which at that time was serving students in grades seven, eight and nine. Member 33 reported that during heated salary negotiations with the Board, he was approached by the Director who suggested to him that perhaps the way he was performing his role as salary negotiator was incompatible with his role as Department Head. Member 33 took this to mean that if he continued to negotiate strongly for the teachers, he might not be reappointed as Department Head. The Director reported that he could not recall the incident, but if it took place, he was acting in the best interests of member 33. Member 33 reported a reserved but cordial relationship with the Director now, on the rare occasions on which they met, and that the Director was enthusiastic about the library centred teaching innovation. The Director reported that he had a high regard for the professional competence of member 33 as a teacher, but that the

relationship between the Board and teachers had suffered because of his mode of negotiation.

The conflict between member 33 and his Department Head, member 12, was a continuing conflict of long standing. Member 33 reported that he perceived member 12 as desiring an army style chain of command relationship, rather than a professional relationship between teachers and Department Heads, that he seemed to resent suggestions for innovation and improvement in teaching methodology, seemed to be primarily interested in preserving the status quo, and seemed to feel member 33 aspired to his position as Department Head. Member 12 reported that he had many differences of opinion with member 33 over teaching methodology, but that he certainly did not see member 33 threatening his position as Department Head. Both of these members were engaged in the library centred teaching innovation, with member 12 engaged to a lesser extent than member 33.

The conflict between members 39 and 12 took place a year prior to this study and arose as an argument over differing opinions related to teaching methodology. Both members reported they got along well together, but that they did have periodic disagreements. Figure III (p. 154) indicates a social link existed between these two members.

The conflict between member 12 and the Principal, member 4, was a continuing conflict which had existed for the three years the Principal had been in this school. The Principal reported that when he joined this staff three years ago, member 12 was an influential member of the staff with an anti-administration bias, and as such had the

effect of being a divisive force in terms of principal-teacher relations. He reported that member 12 was not interested in innovation, and did not function as a Department Head to develop the professional competence of the members of his department. In this regard, the Principal reported that the library centred teaching innovation as related to the teaching of Social Studies, was suggested by himself, but developed through the efforts of members 33 and 44. Member 12 reported that the Principal had many new ideas with which he didn't agree, but that the Principal was knowledgeable and dynamic, and ruthless in the means he would use to gain his desired ends.

At this point it should be reported that the day after the interviews with the members of the staff were completed, the Principal informed member 12 that he would not be reappointed as Department Head for the following year, and that a request was being made to the Superintendent to have member 12 transferred to another school at the end of this school year.

The conflict between the Principal and member 39 arose over the Principal's dissatisfaction with the marking of students' exercises, and with the reluctance of member 39 to meet with the parents of his students to discuss the students' progress. The Principal reported that he was not entirely successful in changing the performance of member 39, and that their relationship now was similar to an armed truce. The Principal stated he had a very high regard for the competence of member 39 as an English teacher. In discussing this conflict, member 39 reported that he and the Principal differed on a few basic

principles, but the Principal had every right to attempt to influence the performance of his teachers. Member 39 reported that in this conflict, he gave way to the Principal's views to some extent, and also described their present relationship as being similar to an armed truce. He reported that he admired the Principal's administrative ability and was very happy working under him.

The conflict between the Principal and member 45 arose over the Principal's dissatisfaction with the marking and grading of students' exercises. The Principal reported that member 45 was now rather reluctantly complying with his policy. The Principal felt that their relationship was now generally pleasant, but that there was still some animosity directed toward him from member 45. He had a very high regard for the competence of member 45 as an English teacher. Member 45 reported there were basic differences between his views and those of the Principal in relation to marking and grading, but that generally he was now following the policy of the Principal. He reported that generally he had a very high regard for the Principal's ability, and that he got along with him fairly well, but that teachers must be on guard against the usurpation of their prerogatives by administrators.

Of the conflicts reported, apparently the only conflict within the system under study which could be neither resolved nor regulated within the system was the conflict between the Principal and the Head of the Social Studies Department.

II. THE CATEGORIZATION OF INFLUENCE RELATIONSHIPS

In the attempt to categorize influence relationships in terms of all possible pairs of members in the system according to Schermerhorn's schema of influence relationships presented in Figure I (p. 21), the categories developed by Schermerhorn appeared to be insufficient to describe adequately the relationships existing in this organizational context. In view of this, four categories were added to Schermerhorn's schema to improve the descriptive value of the typology. The revised schema is presented in Figure V (p. 176). It should be noted that the conceptual bases of Schermerhorn's schema were retained, as were all of Schermerhorn's categories. The four categories added to the schema were all symmetrical categories, so that the revised schema has eight symmetrical and eight asymmetrical categories. It is not suggested that the revised schema would be generally applicable in all organizational contexts; the revision was developed to be useful in describing the relations in the specific organization studied.

Categories Added to Form the Revised Schema

Several relationships were found which could be described as Mutual Regard Based on Expertise. This positive symmetrical relationship was one in which the members held each other in high regard on an intellectual basis, having all of the properties of friendship with the exception of the intense bond of affection which, according to Schermerhorn, characterizes mutual friendship. The liking and affection which

FIGURE V

INFLUENCE AND POWER IN THE PAIR RELATIONSHIP (REVISED)

Emotional Orientation	Symmetrical Relations of Influence	Asymmetrical Relations of Influence
<u>Positive</u>	1. <u>Mutual friendship</u> *2. <u>Mutual regard based on expertise</u> *3. <u>Popularity</u> (emotional accompaniment: affection)	4. <u>Popularity</u> —liking to be with, but not following 5. <u>Modeling after the person</u> (idealization) 6. <u>Following the person's example or command</u> (charisma) (emotional accompaniment: lure, attraction, spontaneity)
<u>Ambivalent</u>	9. <u>Ambivalent or uncertain pair relationship</u> (emotional accompaniment: alternating identifications and antagonisms)	10. <u>Submission to leader or dominant figure who embodies informal group norms</u> 11. <u>Submission to dominant figure as rational expert</u> 12. <u>Submission to dominant person as institutional figure</u> (emotional accompaniment: constraint, respect)
<u>Negative</u>	*14. <u>Avoidance—strain</u> 15. <u>Evenly matched conflict</u> (emotional accompaniment: fear, hostility)	16. <u>Unevenly matched conflict:</u> submission to dominant person as figure of superior strength (emotional accompaniment: fear hostility)
<u>Indifferent</u>	*7. <u>Casual coworkers</u> 8. <u>Casual relations</u> —each initiates action equally for other without emotional involvement (emotional accompaniment: neutrality)	13. <u>Casual relations:</u> submission to dominant figure without emotional involvement (emotional accompaniment: neutrality)

KEY: All relations portrayed are those of influence; those within the broken line are also relations of power. Note the limited set of relations subsumed under authority.

* Categories added to Schermerhorn's original typology.

might exist in this relationship would be of a much lower order than that found in friendship.

Relationships were found in which two members did socialize to some extent, enjoying the company of each other, but where reliance, attributed influence, or a strong bond of affection were absent from the relationship. This type of relationship has been categorized under the positive symmetrical category of popularity, which stands lowest in the suggested hierarchical ordering based on the degree of affection characterizing the three positive symmetrical categories.

Following Schermerhorn's conceptualization discussed in Chapter II, (p. 20) these two categories were classified as influence categories.

There was a need for a category called avoidance--strain, to be descriptive of the relationship discussed previously (p. 170) between member 21 and members 33 and 39. In this relationship there was some degree of mutual fear and hostility, but there was no active power struggle. The emotional discomfort of the fear and hostility were resolved by avoidance when possible, with reservation or strain evident in the relationship when avoidance was not possible. Following Schermerhorn's conceptualization, this negative symmetrical relationship was classified as a power relationship.

Two problems appeared concerning the symmetrical and the asymmetrical categories of casual relations. The relationships existing between members were ascertained by responses to questions contained in the questionnaire relating to communication, reliance,

attributed influence, social relations, friendship relations and conflict relations. The first problem was questions relating to these six kinds of interactions would ascertain few relationships which would be classified as casual relations.

The second problem was that no interactions were discovered among a number of members of the system by the responses to questions relating to these six kinds of interaction. In some instances, no interaction was discovered between two members by the responses to the questions contained in the questionnaire, where there was evidence that the two members did in fact interact. An example of this situation concerned member 11, the Head of the English Department, and four members of the English Department, members 29, 31, 36 and 46. These four members attended English Department meetings, chaired by the Department Head, during which information was exchanged and decisions reached on matters relating to the provisions of instructional facilities, course content, the examination of students and the grading and promotion of students. Yet, in response to the questions contained in the questionnaire, no interaction was reported between the Head of the English Department and these four members.

Two alternative courses of action were considered to resolve these two problems. The first alternative involved two assumptions. One assumption was to assume that in cases such as that cited in the example, the members did in fact interact, and that the relationships between these members could be described as casual relations. The second assumption was that all members of the school staff interacted

to some degree. This assumption was based on the fact that all members of the school staff functioned in the same building, used the same staff room, and attended staff meetings together. If this second assumption were made, where no interaction between two members of the school staff was discovered by means of the responses to the questions contained in the questionnaire, a relationship would be assumed, and would be classified as a casual relationship. It was recognized that in following this procedure, some relationships may be posited and classified as casual relations when in fact no relationship existed.

The second alternative considered was to assume that responses to the questions in the questionnaire would in fact reveal all of the relationships that did exist among members in the system. If this assumption were made, in cases where no interaction was discovered by means of the questions in the questionnaire, it would be assumed that no relationship did exist. In these cases, no categorization would be made, even though there was evidence indicating that the members did interact. It was recognized that in following this procedure, in cases where relationships may exist as casual relations, these relationships would not be classified as such, and it would be indicated that a relationship did not exist.

Recognizing the limitations of each of the alternative procedures, it seemed to be more reasonable to accept the first alternative. However it seemed unreasonable to suggest that relationships should exist between all members of the system. For example it seemed unreasonable to suggest that relationships should exist between

the Superintendent and each member of the system, many of whom had never met the Superintendent. For the same reason it would seem unreasonable to suggest that relationships would exist between some coordinators, such as the Chief Librarian, and each other member of the system. In cases such as these, relationships were omitted unless the data indicated that a relationship did in fact exist.

Acceptance of the two assumptions involved in the adopted procedure meant that in cases where no interaction was discovered between two members of the school staff by means of responses to the questions contained in the questionnaire, a relationship would be assumed, and would by definition be classified as a casual relation.

It was considered useful to generate the category of casual coworker as a descriptive device to distinguish the casual relations of members who were required to come together by organizational variables, from the casual relations of members not required to come together by organizational variables. For example, the casual relations of two members who taught the same subject, and therefore were required to come together in subject department meetings were distinguished from the casual relations of two members who did not teach the same subject and were therefore not required to come together in subject department meetings. Following Schermerhorn's conceptualization, the symmetrical indifferent category of casual coworker was classified as an influence relationship. Casual relationships of members who were not required to come together in department meetings were categorized under the heading casual relations.

The symmetrical indifferent categories of casual coworker and casual relations were characterized by an absence of any organizational status differential between members of the pair. An absence of interaction between a Department Head and a teacher who were not members of the same department would be classified under the symmetrical category of casual relations. An absence of interaction between a Department Head and a teacher who were members of the same department would be classified under the asymmetrical category casual relations because of the organizational status differential.

No interaction was found between member 3, the Director, and a number of members of the school staff by means of responses to questions contained in the questionnaire. Yet, the Director had inspected the teaching performance, and had written reports, on each member of the school staff with the exception of the Principal and Vice-Principal. Although the Director confined his activity as an inspector to inspecting the teaching performance of teachers in their probationary year, he could and occasionally did inspect and write reports on the performance of other teachers. For these reasons, the assumption was made that relationships would exist between the Director and each member of the school staff. In cases where no interaction was discovered by means of responses to the questions contained in the questionnaire, the relationship was classified under the asymmetrical category of casual relations. This procedure did affect the examination of Hypothesis 3.1. The affect of this procedure on the examination of this hypothesis is discussed in some detail on page 206.

Method of Categorizing Relationships

Relationships between members were identified by the responses on the communication, reliance and attributed influence sections in Part I, the social relations sections in Part II, and the conflict relation section in Part III of the Sociometric Questionnaire (Appendix A., p. 262). Data relating to each of these relationships was obtained during the personal interview, particularly by means of Parts 1, 2 and 3 of the Personal Interview Schedule (Appendix B, p.289). As the relationships to be categorized were relationships between pairs of members, data relating to each member of the pair was considered in making the categorizations. The data used in making categorization decisions will be discussed under the heading of each category.

Category 1, Mutual Friendship. To be classified in this category, there were reciprocated friendship responses, and no evidence of one member having dominance over the other member in terms of being a reliance or attributed influence figure.

Category 2, Mutual Regard Based on Expertise. Relationships in this category were characterized by reciprocated communication and reliance links based upon mutual recognition of expertise. There may also have been attributed influence links and social links, but not reciprocated friendship links.

Category 3, Mutual Popularity. These relationships were characterized by reciprocated social links, with an absence of reliance and attributed influence links.

Category 4, Popularity. These asymmetrical relationships were characterized by unreciprocated friendship or social links, unreciprocated communication links, and an absence of reliance and attributed influence links.

Category 5, Modeling After the Person. As Schermerhorn pointed out, (2, p. 5) this category was a marginal case falling between popularity and charisma. Perhaps because of its marginality, no relationships were found in this system which seemed to fall into this category. This was the only category in the revised schema which was not used to classify relationships.

Category 6, Following the Person's Example or Command. Relationships were categorized under this heading on the basis of the compliant member of the pair accounting for the other's dominance in such terms as, "He is marvelous, I can't think of any quality he doesn't have," "he has everything, knowledge, ability, a strong personality, he is pleasant and fair and considerate, he just has everything," or "he is the epitome of the perfect Department Head."

Category 7, Casual Coworkers. The characteristics of relationships in this category have been explained previously. Relationships were classified in this category if there was no indication of a relationship by either member of the pair, and yet their duties would require the members to interact to some degree.

Category 8, Casual Relations. This category was used to classify relationships when there was no evidence of interaction between members, and no organizational variable which would require the members to interact.

Category 9, Ambivalent or Uncertain Pair Relationships. Relationships under this category were characterized by reciprocated social, communication, or reliance links, and reciprocated statements of disagreements or conflicts on some issues. These relationships are discussed in some detail in this chapter.

Category 10, Submission to Leader or Dominant Figure Who Embodies Informal Group Norms. These relationships were characterized by the dominance of one member of the pair, where the dominance resulted from informal group norms either held by the compliant person, or acceded to by the compliant person because the norms were held by a group with which he identified. These relationships are discussed in some detail in this chapter.

Category 11, Submission to a Dominant Figure as a Rational Expert. These relationships were characterized by unreciprocated reliance links where the compliant member's perception of the dominant member was one of knowledge, ability and expertise.

Category 12, Submission to a Dominant Person as an Institutional Figure. These relationships were characterized by unreciprocated reliance and attributed influence links between members with

differentiated organizational status, where the compliant member accounted for the other's dominance in such terms as, "he is the boss," "because of his position," or "you must follow the chain of command."

Category 13, Casual Relations. Relationships were classified in this category if there was no indication of a relationship between two members with differentiated organizational status, where duties would require the members to interact to some degree. The example given previously was of an absence of interaction between a Department Head and a member of the same department.

Category 14, Avoidance--Strain. The characteristics of the relationships in this category have been discussed previously (p. 177).

Category 15, Evenly Matched Conflict. A relationship of this type was characterized by a reciprocated conflict link, where the conflict was continuing, and where neither member appeared to be dominant in the struggle. The relationship between member 33 and member 12 reported earlier (p. 172) was of this type, and was the only relationship of this nature found in the system.

Category 16, Unevenly Matched Conflict. A relationship of this type was characterized by a continuing conflict, where one member appeared to be dominant in the struggle. The relationship between the Principal, member 4, and the Social Studies Department Head, member 12, was of this type, and was the only relationship of this type found in the system.

The adequacy of the descriptiveness of two of these categories suffered because the categories were insufficiently discrete. Several instances were found where members were mutual friends, but also each held the other in high regard on the basis of expertise. In these instances, the relationships were categorized as mutual friendship relations, sacrificing the information of their mutual regard based on expertise, which was information pertinent to the functional analysis of an organization.

Significant Relationships

A summary of the relationships between all members of the system is reported in Appendix D (p. 304). Although there was a reciprocated friendship link between the Superintendent and the Assistant Superintendent, the relationship between them was classified as one of charisma. These two members had worked together previously in other school districts, with the Superintendent always in the dominant position. There was an affectionate bond between these two members, but as reported by both members, the Superintendent was clearly the dominant member of the pair, with the Assistant Superintendent identifying closely and patterning himself after the Superintendent.

The relationship between the Superintendent and the Director, and the relationship between the Assistant Superintendent and the Director were classified as submission to a dominant person as an institutional figure although these three members had reciprocated

social links. The Director reported that prior to the appointment of the Assistant Superintendent, he had worked very closely with the Superintendent, and had been responsible for many administrative tasks for which the Assistant Superintendent assumed responsibility. According to the Director, some friction had developed between the Director and the Superintendent and Assistant Superintendent during the period of adjustment when the Assistant Superintendent's role was being defined, and the Director's role was being redefined. This friction had been ameliorated in time, and the Director reported that his relationships with his two superiors became quite amiable. However, he felt that his relationship with the Superintendent lacked the affection and regard that had been present in their former relationship. He described his relationship with the Assistant Superintendent as being cordial. The report of the Director was substantiated by the Superintendent.

The relationship between the Superintendent and the Principal has been classified as one of mutual regard based on expertise. These two members were constantly in communication with each other, expressed admiration for each other, and relied on each other. There was no evidence to suggest periodic conflicts between these two members, nor to suggest that operationally one member was dominant over the other.

The relationships between the Superintendent and members 33 and 45, which have been discussed previously (p. 169), were classified as avoidance--strain relationships.

The relationship between the Assistant Superintendent and the

Principal was classified as an ambivalent relationship. As reported earlier (p. 114), the Principal appeared to bypass the Assistant Superintendent to deal directly with the Superintendent. However there were reciprocated communication and reliance links between these two members. Both members reported they usually got along well together but had experienced periodic heated disagreements.

The relationship between the Director and the Principal has been classified as one of casual relations. There were no reciprocated communication links between the Principal and the Director, no reliance or attributed influence links from the Principal to the Director, but there were reliance and attributed influence links from the Director to the Principal. In this defined system, the Principal appeared to be the dominant member of the pair.

The relationship between the Director and member 33, which was discussed previously (p. 171), was classified as an avoidance--strain relationship.

As indicated previously (p. 117) the Director seemed to have little influence in this system. As reported in Appendix D (p. 304), the majority of his relationships were categorized as casual relations, by definition, following the procedure reported previously (p. 181). Of the nine members of the school staff who were categorized as being subservient to him as an institutional figure, two were in their first year of teaching and five were in their first year of teaching in this school (Table III, p. 70). Thus, seven of these members were probationary teachers dependent upon satisfactory reports from the

Director to be made members of the permanent staff of the school district. The Director seemed to have no interaction with the Department Heads.

The relationship between the Principal and the Vice-Principal was clearly one of submission to a dominant figure as a rational expert, with the Principal being the dominant member of the pair. The relationship between the Principal and the Head of the Social Studies Department, which was discussed previously (p. 172), was classified as one of unevenly matched conflict. The Principal's relationship with member 39 was classified as a symmetrical ambivalent relationship, as each member expressed a high regard for the ability of the other, and each member reported periodic conflicts with the other (p. 173). Neither member would suggest a dominant member of the pair. The relationship between the Principal and member 45, which was discussed previously (p. 174) was classified as an avoidance--strain relationship.

The Principal had only three symmetrical relationships. These were with the Superintendent, the Assistant Superintendent, and member 39. All but six of his relationships were classified as authority relationships. Of the nine charismatic relationships in the system, six were between the Principal and members of the school staff, three males and three females. The majority of the Principals' relationships were based on a regard for his expertise. Five of the seven Department Heads submitted to him as a rational expert.

Because of the lack of interaction with the Superintendent, Assistant Superintendent and the Director, the relationships of the

Vice-Principal with these members have been classified as casual relations. The relationships of the Vice-Principal with five members of the school staff have been classified as submission to a leader or dominant figure who embodies informal group norms, with the Vice-Principal in the dominant position. Each of these members attributed influence to the Vice-Principal on the same basis, expressed by one teacher in the words, "He is such a considerate gentleman, I would not wish to upset him by disagreeing with him, or failing to accede to his requests."

All but one of the Vice-Principal's relationships with members of the school staff were classified as authority relationships, but a much lower proportion than the Principal's were based on a regard for his expertise. Of the Department Heads, only the Science Department Head indicated a regard for his expertise.

Only one of the relationships between Department Heads was classified as mutual friendship, and one was classified as mutual regard based upon expertise. Half of these relationships were classified as casual relations. The Department Heads did not appear to form a cohesive group.

The relationships between the Head of the English Department, and the Heads of the Social Studies, Science and French Departments were classified as ambivalent relationships. There were few communication links, no reliance links, and no social links between these three members. The Head of the English Department reported that the other three members were able Department Heads, and were influential

members in Department Head meetings, but that he often found himself in disagreement with them. The Heads of the Social Studies, Science and French Departments reported similarly on their relationship with the Head of the English Department.

The relationship between the Head of the Social Studies Department and member 39, which was discussed previously (p. 172), has been classified as ambivalent because of their reciprocated social link, and because both members reported they rather liked each other, but both reported periodic disagreements and conflicts.

The relationships between the Head of the Social Studies Department and the two counsellors, members 19 and 20, were classified as ambivalent. The Head of the Social Studies Department made common knowledge among staff members his view that counsellors generally did not serve a useful purpose in a secondary school, and were therefore superfluous. However, he did rely on the judgment of the counsellors in matters concerning relations between the school and parents.

The relationship between member 12 and member 33 discussed previously (p. 172) has been classified as one of evenly matched conflict, because at the time the data was gathered there was no evidence of one member being dominant over the other, and the pending removal of member 12 by the Principal was not known.

The relationship between member 17, the Physical Education Department Head, and member 36, who taught Physical Education has been classified as ambivalent. Member 36 reported that member 17 was an excellent Physical Education teacher, had developed an excellent

extra-curricular athletic program, and was a good Department Head in terms of Physical Education for boys. However, she felt that his demands on Physical Education teachers to take part in the extra-curricular athletic program were excessive, and that he had little interest in and gave little leadership in Physical Education for girls. Member 17 reported that member 36 was a good Physical Education teacher, but that she was reluctant to accept her responsibilities in the extra-curricular athletic program.

Several relationships classified as avoidance—strain relationships have been discussed previously. The relationships were between member 20 and member 33 (p. 170), and between member 21 and members 33 and 39 (p. 170).

Both counsellors had a high proportion of their relationships with other members of the school staff classified as being based on a regard for their expertise, indicating the counsellors were generally held in high regard by staff members. Relatively few relationships between teachers and counsellors were classified as being casual relations, with the female counsellor having more of these relationships than the male counsellor.

There were many relationships between the librarian and members of the school staff classified as casual relations, with the majority of these being between the librarian and members involved in the teaching of Science, Mathematics and Commerce. A high proportion of the relationships between the librarian and members involved in the teaching of English and Social Studies were based upon a regard for

the librarian's expertise.

Relationships Within Departments

English Department. The relationships between members of the English Department are reported in Table XX (p. 194). The relationships between member 23 and members 29, 36, 39, 42 and 45 have been classified as casual relations rather than casual coworkers. Member 23 taught only Commercial English courses to commerce students on a non-university entrance program, and reported that she rarely had any interaction with the English Department Head, and rarely attended English Department meetings.

The Department Head, member 11, was classified as an influential on eight of the twelve Task Topics (Table XI, p. 135). Of the nine relationships between the English Department Head and members of his department, four were classified as casual relations and one as popularity. The five teachers concerned in these relationships, members 23, 29, 31, 36 and 46, all taught other subjects in addition to English. Of his relationships with teachers who taught only English, one was classified as charismatic, one was classified as friendship, one was classified as mutual regard based on expertise, and one was classified as submission to a dominant person as an institutional figure. As pointed out previously (p. 120), the Department Head seemed to gain his influence from his interaction with the Principal.

Member 27, who was in his first year of teaching, seemed to have been highly dependent with a charismatic relationship with

member 11, and relationships characterized as submission to a rational expert with five other members of the department. Members 23, 29 and 46 seem to have been involved little with other members of the department.

TABLE XX
INFLUENCE RELATIONSHIPS
WITHIN
THE ENGLISH DEPARTMENT

Members	11	23	27	29	31	36	39	42	45	46
11		4	6	13	13	13	1	2	12	13
23			11	3	8	8	8	8	8	1
27					7	7				7
29			11		7	7	7	7	7	2
31							3	3	7	7
36					4			4		2
39			11			11		1	2	7
42			11							7
45			11			11		11		7
46										

NOTE: Symmetrical relationships appear above the diagonal only. The dominant member in asymmetrical relationships is designated by the identification of the row in which the relationship appears.

Member 39, was classified as an influential on Task Topics 4 and 5 (Table XI, p. 135), ranked relatively high on all dimensions of Task Topic 6 (Table V, p. 101), was a significant centre of social

relationships and friendship relationships (Figure III, p. 154), and had three conflict relationships (Figure IV, p. 168). He had three relationships within this department based upon regard for his expertise, and two friendship relationships in which a regard for his expertise was involved in both cases. Member 45, who was classified as an influential on Task Topic 5 (Table XI, p. 135), and ranked relatively high on the reliance and attributed influence dimensions of Task Topics 4 and 6 (Table V, p. 101), had four relationships within this department based upon regard for his expertise. He did not have a high regard for the expertise of the Department Head. There seemed to be little cohesiveness in the relationships among members of this department.

Social Studies Department. Of the five relationships between the Social Studies Department Head and the members of his department reported in Table XXI (p. 196), three were authority relationships, with one of these based on a regard for his expertise. Member 37 who taught a non-university entrance program course, did not seem to be involved with the other members of the department. Members 36 and 37 taught Physical Education as well as Social Studies. Member 33, who was classified as an influential on Task Topics 4 and 5 (Table XI, p. 135), ranked high on the reliance and attributed influence dimensions of Task Topic 6 (Table V, p. 101), was a centre of interaction in social relationships and friendship relationships (Figure III, p. 154), and conflict relationships (Figure IV, p. 168), had an evenly matched conflict relationship with the Department Head. With the other two members of the department who taught only Social Studies, member 33

had one relationship based on regard for his expertise, and one friendship relationship in which regard for his expertise was involved. There seemed to be little cohesiveness among members of this department.

TABLE XXI
INFLUENCE RELATIONSHIPS WITHIN THE SOCIAL STUDIES DEPARTMENT

Members	12	33	36	37	38	44
12		15	11	13	12	12
33			3	7	11	1
36					7	7
37			4		7	7
38						3
44						

NOTE: Symmetrical relationships appear above the diagonal only. The dominant member in asymmetrical relationships is designated by the identification of the row in which the relationship appears.

Mathematics Department. The relationships between members of this department are reported in Table XXII (p. 197). Only one relationship between members of this department was not based on a regard for expertise. The cohesiveness of this department suggested by the mutual reliance and attributed influence links reported previously (p. 100), was supported by these relationships. As discussed previously, this cohesiveness did not extend to social relationships

(p. 160). All members of this department taught only mathematics.

TABLE XXII

INFLUENCE RELATIONSHIPS WITHIN THE MATHEMATICS DEPARTMENT

Members	13	26	32	40
13		6	2	11
26			7	2
32				2
40				

NOTE: Symmetrical relationships appear above the diagonal only. The dominant member in asymmetrical relationships is designated by the identification of the row in which the relationship appears.

Science Department. All four of the relationships between the Science Department Head and members of his department reported in Table XXIII (p. 198) were based upon regard for his expertise. As discussed previously (p. 77, 119), the Science Supervisor, member 7, had been involved little with members of this department. The three male members of this department, members 14, 25 and 30 seemed to be cohesive, with all relationships between them based on expertise, while the two female members, members 35 and 43, relied on the three male members. The two female members were in their first year of teaching in this school, and member 43 taught Home Economics as well as Science.

TABLE XXIII
INFLUENCE RELATIONSHIPS WITHIN THE SCIENCE DEPARTMENT

Members	14	25	30	35	43	7
14		2	11	11	11	7
25			2	11	7	7
30				11	11	
35					11	7
43						7
7			11			

NOTE: Symmetrical relationships appear above the diagonal only. The dominant member in asymmetrical relationships is designated by the identification of the row in which the relationship appears.

French Department. The relationships between members of the French Department are reported in Table XXIV (p. 199). Of the four relationships reported which were based upon regard for expertise, not one was a relationship with the Department Head. The French Supervisor, member 8, had two relationships based on his expertise. Members 29 and 46, whose relationship was classified as being mutual regard based on expertise, also were linked socially (Figure III, p. 154). The three teachers in this department all taught other subjects in addition to French.

TABLE XXIV
INFLUENCE RELATIONSHIPS WITHIN THE FRENCH DEPARTMENT

Members	15	22	29	46	8
15		12	12	12	12
22			7	11	7
29				2	2
46					
8				11	

NOTE: Symmetrical relationships appear above the diagonal only. The dominant member in asymmetrical relationships is designated by the identification of the row in which the relationship appears.

Commerce Department. In the relationships between members of the Commerce Department reported in Table XXV (p. 200) the two male members, members 16 and 21 shared a mutual regard based on expertise. The female member, member 23, who also taught Commercial English and who was involved little with the members of the English Department (p. 193), did not have a relationship with either member 16 or 21 which was based upon a regard for expertise.

Physical Education Department. The relationships between members of the Physical Education Department reported in Table XXVI (p. 200) indicate the two male members, members 17 and 37 shared a mutual regard based on expertise, the two female members, members 36 and 41 shared a mutual regard based on expertise, and members 17 and 41

shared a mutual regard based on expertise. Members 36 and 37 taught other subjects in addition to Physical Education.

TABLE XXV

INFLUENCE RELATIONSHIPS WITHIN THE COMMERCE DEPARTMENT

Members	16	21	23
16		2	12
21			7
23			

NOTE: Symmetrical relationships appear above the diagonal only. The dominant member in asymmetrical relationships is designated by the identification of the row in which the relationship appears.

TABLE XXVI

INFLUENCE RELATIONSHIPS WITHIN THE
PHYSICAL EDUCATION DEPARTMENT

Members	17	36	37	41
17		9	2	2
36				2
37		4		7
41				

NOTE: Symmetrical relationships appear above the diagonal only. The dominant member in asymmetrical relationships is designated by the identification of the row in which the relationship appears.

Relationships Within the Library Centred Teaching Innovation Group

The relationships between members of the library centred teaching innovation group are reported in Table XXVII (p. 202). Among the members of this group there were eight mutual friendship relationships, in all of which a mutual regard for expertise was involved. There were seven relationships classified as mutual regard based on expertise, and two asymmetrical relationships based on a regard for expertise. Of the twenty-eight relationships reported, seventeen were based on a regard for expertise, five were based on popularity, three were symmetrical power relationships, two were based upon a members' formal position and one was a casual relationship. With the exception of the members of the Mathematics Department which formed a much smaller group, no other group of teachers seemed to be so cohesive, nor to have had such a high proportion of relationships based upon a regard for expertise.

Perhaps the apparent lack of cohesiveness among members of departments results in part from the fact that Department Heads had not been active leaders in the task areas represented by Task Topics 4, 5 and 6, relating to the selection of the content to be taught in each course, the selection of the methodology of instruction to be used in each course, and classroom organization for instruction (p. 85). In these areas teachers had been relatively free to make their own decisions, and thus were interdependent upon each other to a limited extent.

Three reasons are suggested for the cohesiveness and high

regard for expertise found in the library centred teaching innovation group. First, these members were much more interdependent than members grouped by departments because of the flexible time-table scheduling which was arranged informally amongst themselves, and because all members worked closely with, and shared the services of the librarian. Second, members took part in this group voluntarily, so that members became involved only if they felt a need to become involved. Third, the nature of the innovation required teachers to adapt their teaching skills to a new process of teaching with which

TABLE XXVII

INFLUENCE RELATIONSHIPS BETWEEN MEMBERS ACTIVE IN THE LIBRARY
CENTRED TEACHING INNOVATION

Members	11	12	18	33	39	42	44	45
11		9	2	1	1	2	8	12
12			2	15	9	3	12	4
18				1	1	11	2	2
33					1	3	1	2
39						1	1	2
42								
44							4	
45						11	4	

NOTE: Symmetrical relationships appear above the diagonal only. The dominant member of asymmetrical relationships is designated by the identification of the row in which the relationship appears.

none of them was familiar before taking part in the innovation. This has required much study and rethinking by the members, and discussion among the members of teaching skills and learning processes.

Summary of Influence Relationships

A summary of influence relationships for each member in the system is reported in Table XXVIII (p. 204). Only three members, the Principal, the Director and the Vice-Principal had relationships with each other member of the defined system. The school district coordinators, members 6, 7, 8, 9 and 10, who did not function wholly within the school organization, had few relationships with members of the school staff. Of the 792 relationships categorized, 402 were categorized as symmetrical casual relationships, most of these by definition following the procedure reported previously (p. 179). This number did not seem to be surprising in view of the restrictions on the formation of relationships imposed by the working conditions of the members of the school staff (p. 153). According to the data reported in Table XXIX (p. 205), which were obtained by grouping the categories of relationships into the broader classifications indicated in Figure V (p. 176), there were many more symmetrical relationships than asymmetrical relationships. This appears to be in disagreement with Schermerhorn's statement that, "there are many more asymmetrical than symmetrical pair relations, since symmetry is an ideal seldom achieved" (2, p. 4). Of the small number of negative relationships, all but the one asymmetrical relationship seem to have

been resolved or regulated within the system. Of the total number of relationships, the largest portion was classified as influence relationships, and the smallest portion was classified as power relationships.

TABLE XXIX
SUMMARY OF ALL INFLUENCE RELATIONSHIPS IN THE SYSTEM

	Symmetrical	Asymmetrical	Totals
Positive	91	70	161
Ambivalent	9	167	176
Negative	8	1	9
Indifferent	<u>402</u>	<u>44</u>	<u>446</u>
Totals	510	282	792
	Influence Relationships	554	
	Power Relationships	62	
	Authority Relationships	<u>176</u>	
	Total	792	

Hypothesis 3.1

Eighty-nine relationships are reported in Appendix D (p. 304) between administrators and teachers. All of these relationships were classified as power relationships, with 65 classified as authority relationships, 19 classified as asymmetrical power relationships, and 5 classified as symmetrical power relationships. Of the 5 symmetrical

power relationships, four were avoidance--strain relationships, and one was an ambivalent or uncertain relationship. By definition, the two symmetrical indifferent categories of casual coworkers, and casual relations could not be used to classify relationships between administrators and teachers (p. 180). Although not restricted by definition to exclude relationships between administrators and teachers, no relationships were found which were classified in the asymmetrical category of popularity, or in the three symmetrical positive categories of mutual friendship, mutual regard based on expertise, or popularity.

The 19 asymmetrical power relationships reported were all between the Director and teachers, and were classified in this category by definition as a result of the procedure reported previously (p. 181). If these 19 relationships had not been classified by definition, no relationships would have been reported between the Director and the 19 teachers concerned. If these relationships had not been classified by definition, there would have been a total of 70 relationships classified between administrators and teachers, with 65 of these being authority relationships, and 5 being symmetrical power relationships.

According to these data, the hypothesis that influence relationships between administrators and teachers would be primarily asymmetrical power relationships, was considered to be supported.

Hypothesis 3.2

According to the data reported in Table XXX (p. 208), the majority of relationships between teachers are classified as indifferent relationships.

Most of the relationships classified as symmetrical indifferent relationships were classified by definition, following the procedure reported previously (p. 179). There were seven categories in which no relationships between teachers were classified. These seven categories were all of power relationships. By definition, the asymmetrical power category of casual relations could not be used to classify relationships between teachers (p. 180). The other six categories were not restricted by definition to exclude relationships between teachers, and there appears to be no reason to believe that relationships which could be classified in these categories could not exist between teachers in this system.

The 21 relationships reported in category 12, submission to a dominant person as an institutional figure, were all relationships between the two counsellors and other teachers, and appeared to result primarily from the roles of the counsellors in regard to relations with parents. As reported earlier (p. 83) all direct contact between the school and parents, whether initiated by a school staff member or a parent, was channeled initially through the counsellors. Thus the counsellors, although classified as teachers, had specific institutional responsibilities to coordinate the activities of all other teachers in regard to relations with parents. These 21 relationships formed part

TABLE XXX

SUMMARY OF INFLUENCE RELATIONSHIPS BETWEEN TEACHERS

Categories	Number of Relationships		
1, Mutual Friendship	8		
2, Mutual Regard of Expertise	20		
3, Popularity (Symmetrical)	20		
4, Popularity (Asymmetrical)	38		
5, Idealization			
6, Charisma			
7, Casual Coworkers	28		
8, Casual Relation (Symmetrical)	231		
9, Ambivalent			
10, Submission Because of Group Norms			
11, Submission to Rational Expert	37		
12, Submission to Institutional Figure	21		
13, Casual Relations (Asymmetrical)			
14, Avoidance—Strain	3		
15, Evenly Matched Conflict			
16, Unevenly Matched Conflict			
Total	406		

	<u>Symmetrical</u>	<u>Asymmetrical</u>	Totals
Positive	48	38	86
Ambivalent		58	58
Negative	3		3
Indifferent	<u>259</u>		<u>259</u>
Totals	310	96	406

Influence Relationships	345
Power Relationships	3
Authority Relationships	<u>58</u>
Total	406

NOTE: Most of the relationships classified in Categories 7 and 8 were classified by definition (p. 179).

of the 58 relationships classified as authority relationships.

The roles of the counsellors in the organization of this system resulted in the classification of 21 relationships between teachers as submission to a dominant person as an institutional figure. Therefore the hypothesis that influence relationships between teachers could be of any type, with the exception of the asymmetrical power relationship characterized by submission to a dominant person as an institutional figure could not be supported.

Summary

Twelve conflict relationships were reported among members in this system. Of these twelve relationships, eight were reported as arising from salary negotiations between the teachers and the Board.

Of the 792 relationships classified among members of this system, the majority were indifferent relationships. The largest proportion of relationships among all members of the system were classified as influence relationships, and the smallest proportion were classified as power relationships.

All relationships classified between administrators and teachers were power relationships. The largest proportion of these relationships were classified as authority relationships, however five symmetrical power relationships were classified.

The majority of the relationships classified among teachers were symmetrical indifferent relationships. The largest proportion of these relationships were classified as influence relationships and the

smallest proportion were classified as power relationships.

Hypothesis 3.1, that influence relationships between administrators and teachers would be primarily asymmetrical power relationships was considered to be supported.

Hypothesis 3.2, that influence relationships between teachers could be of any type, with the exception of the asymmetrical power relationship characterized by submission to a dominant person as an institutional figure, was not supported for two reasons. First, because of a procedure adopted to classify relationships, the asymmetrical category of casual relations could not be used to classify relations between teachers by definition. Second, the counsellors, although classified as teachers, had specific institutional responsibilities which resulted in a number of relationships between counsellors and other teachers being classified as submission to a dominant person as an institutional figure.

BIBLIOGRAPHY CHAPTER VII

- (1) Manual of School Law and Rules of the Council of Public Instruction,
(Victoria, Queen's Printer, Province of British Columbia, 1962).
- (2) Schermerhorn, R. A., Society and Power, (New York, Random House,
1961).

CHAPTER VIII

ANALYSIS OF THE DATA: SUB-PROBLEM 4.0

Sub-problem 4.0 was stated in the form: What is the nature of the relationships between teachers and administrators within the organization? The analysis of the data concerning this sub-problem, and the four hypotheses related to this sub-problem are reported in this chapter.

Hypothesis 4.1

The sanctions available to administrators in the defined system which might have been used in their relationships with teachers, seemed to be classifiable into two categories. Those sanctions operative in the intimate pair relationship, which may or may not have been visible to other members of the system may be classified in one category. Those sanctions operative in the pair relationship which would have been visible to other members of the system, and therefore would tend to affect the other members' perceptions of a teacher's status may be classified in a second category.

The positive sanctions which may or may not have been visible to other members of the system would be sanctions such as the establishment of a normally pleasant relationship, the offering of approval or praise, the seeking of advice from, or the establishment of a friendly relationship with the teacher. The positive sanctions which would have been visible to other members of the system would be sanctions such as the

establishment of a close working relationship with the teacher, the praise of the teacher to other members of the system, the referral of other teachers for advice or assistance, the assignment of special tasks to a teacher which would require some perceived special competence, the assignment of a teacher to teach more senior courses, the appointment of a teacher as a Department Head, or the recommendation of a teacher for appointment as a supervisor or administrator.

The negative sanctions available to an administrator would be the reverse of the positive sanctions. The negative sanctions which may or may not have been visible to other members of the system would be sanctions such as the establishment of a normally unpleasant relationship with the teacher, the expression of disapproval or blame, the contradiction of the teacher's view of a situation, the refusal to recommend the teacher for a promotion, or the establishment of a hostile relationship with the teacher. The negative sanctions which would have been visible to other members of the system would be sanctions such as the tendency to ignore the teacher consistently, expression of disapproval or blame of the teacher to other members of the system, the withdrawal or the refusal to assign special tasks for which the teacher had a perceived special competence, the reassignment of a teacher to teach less senior courses, the failure to appoint as Department Head a teacher whose special competence was acknowledged by other staff members, the failure to reappoint a teacher as Department Head, the transfer of a teacher to another school, or the recommendation that a teacher be dismissed from the school district.

Clause 11 of the salary agreement between the teachers of this district and the Board, allowed for the application of negative remunerative sanctions:

After due consideration of reports from the Superintendent of Schools (or the Assistant Superintendent of Schools or the Director of Instruction) and the Principal concerned, the Board may withhold increments, or withdraw increments in case of a teacher at maximum, for service or professional growth considered to be less than satisfactory.

However, the Superintendent reported that this clause was not operative. The Superintendent and the Director could recall one instance some years ago where this clause was used to reduce a teacher's salary, but could not remember any details. No other member of the system had any knowledge of this clause being used, nor had any expectation of its being used.

In this system, the only remunerative aspects to sanctions were those which would result from a promotion from teacher to Department Head, Supervisor or Administrator, the demotion from any of these positions, or the dismissal of a teacher from the school district.

As all teachers in their first year of teaching in this school district were classed as probationary teachers, and could be dismissed from the district without the right of appeal (p. 80), dismissal of probationary teachers was not uncommon. The Superintendent reported that because of difficulties which arose over appeals, teachers classed as permanent staff members of the district were rarely dismissed.

During the personal interview, teachers were questioned concerning the differential distribution of status according to position

or teaching assignment. They were asked to rank positions and assignments in hierarchical order from that to which the highest status accrued, to that to which the lowest status accrued. The rankings assigned by teachers resulted in the following order. The highest status was reported as accruing to administrators. Department Heads and Supervisors were ranked second. Teachers who taught terminal courses on the university entrance program which were subject to Provincial Government external examinations ranked third. Counsellors, and teachers who taught courses on the university entrance program which were not subject to Provincial Government external examinations ranked fourth. Teachers of courses on non-university entrance programs ranked fifth. Thus any change in position or assignment up this hierarchy would result in an improvement in status, and any change in position or assignment down this hierarchy would result in a deterioration in status.

In terms of the reactions of teachers to the application of sanctions the most meaningful classification of sanctions available to administrators as being normative, remunerative or coercive, would be a classification according to the perceptions of the teachers involved. Teachers were asked to classify the various administrative behaviours representing sanctions as being coercive. All teachers indicated that the threat of being dismissed from the school district would certainly be classed as coercive, however a majority of teachers indicated that the possibility of being dismissed was so remote that it was not worthy of consideration. Twenty-three teachers, or 79.31

percent of teachers indicated that a threatened forced transfer from this school would be classified as being coercive. All teachers agreed that a threatened demotion from being an administrator, Department Head or a Supervisor would be classified as coercive, although only one teacher had any knowledge of this ever having happened. The one case has been discussed previously (p. 171).

Teachers were asked to classify the various administrative behaviours representing sanctions as being remunerative. All teachers reported that any recommendation for, or suggested promotion to, the position of Department Head, Supervisor or Administrator, or any threatened demotion from one of these positions certainly had a remunerative aspect. However, all teachers agreed that the nature of the work involved, and the professional status involved in these positions were of far greater importance than the remunerative differential involved. Twenty-five teachers, or 86 percent of the teachers reported they had no aspirations to become an administrator, while ten teachers or 34 percent of the teachers reported they had no aspirations to become a Department Head or Supervisor. As there was no operative means of imposing remunerative sanctions in this system other than by a change of position, and as teachers reported the remunerative aspect of a change of position was not of major importance, there were no sanctions which were classed as remunerative sanctions.

All other sanctions available to administrators were classified as normative sanctions.

All teachers reported that in their own relationships with

administrators in this system, all administrators used predominantly normative sanctions. Obviously there could be no case of the use of remunerative sanctions. Only one case of a perception of threatened coercive sanctions was reported. This was reported by member 33 and was discussed previously (p. 171). However, all teachers reported that their continued presence as members of this school staff depended upon the Principal's assessment of their performance. Teachers unanimously reported that the Principal demanded a high quality of performance from the teachers on this staff, and that if the Principal became dissatisfied with the performance of any teacher, he would have that teacher transferred out of this school. Seventeen teachers, or 62 percent of the teachers agreed that although they did not have a feeling of insecurity, this latent threat of forced transfer did influence their behaviour to some extent.

These teachers reported that a threatened or forced transfer from any school would be somewhat coercive, but it would be much more so from this particular school, as the school was regarded by the public, and by teachers generally in the area as being an excellent school. Eleven teachers, or 38 percent of the teachers felt that the latent threat of forced transfer did not influence their behaviour.

The Principal agreed that he would request the transfer of any staff member whose performance he assessed as being unsatisfactory, and that he had never had a request for the transfer of a teacher refused by the Superintendent. Information relating to the number of forced transfers of teachers from this school during the past three years was

not made available.

To define more clearly the degree to which sanctions affect the behaviour of teachers would require much more sensitive instrumentation than that used in this study.

Although all teachers reported that in their own relationships with administrators in this system, all administrators used predominantly normative sanctions, and although only one teacher reported a perceived threat of the use of coercive sanctions, yet all teachers were aware that coercive sanctions had been imposed on other teachers in this system. Because of this knowledge, 62 percent of the teachers reported that the latent threat of the use of coercive sanctions did influence their behaviour to some extent. Therefore the teachers perceived the operative sanctions used by administrators in this system to be a mixture of normative and coercive sanctions. For this reason the hypothesis that the sanctions used by administrators to gain the compliance of teachers was perceived by teachers to be predominantly normative rather than remunerative or coercive could not be supported.

Hypothesis 4.2

The five administrators in the system were asked to rate themselves as being sensitive or insensitive to expressions of approval or disapproval from their subordinates on a six point scale ranging from (1) very sensitive to (6) very insensitive (Appendix B, p. 297). The Superintendent, Assistant Superintendent, Principal and Vice-Principal all rated themselves as being (2) sensitive, while the Director rated

himself as being (3) fairly sensitive. The Superintendent and Principal both stated that their sensitivity may be not readily apparent to their subordinates. An administrator's sensitivity to the problems or feelings of subordinates could not always result in actions which would please the subordinate.

In the analysis of the remainder of the data related to this hypothesis, the Superintendent and Assistant Superintendent have been omitted. Because of the lack of interaction between these two members and teachers, teachers had neither perceptions of the use of sanctions by, nor the sensitivity of these two members.

Twenty-one teachers, or 72 percent of the teachers reported they had on occasion expressed approval of the Principal's behaviour to him, while 4 teachers, or 13 percent of the teachers reported they had expressed disapproval. Twenty-six teachers, or 93 percent of the teachers reported they had expressed approval of the Vice-Principal's behaviour to him, while 7 teachers or 24 percent of the teachers reported they had expressed disapproval. Ten teachers, or 34 percent of the teachers reported they had expressed approval of the Director's behaviour to him while 6 teachers, or 21 percent of the teachers reported they had expressed disapproval.

Data concerning teachers' perceptions of the degree of sensitivity of the Principal, Vice-Principal and Director to the use of normative sanctions by teachers were solicited during the personal interview by means of a six point scale ranging from (1) very sensitive to (6) very insensitive (Appendix B, p. 296). Means for each of these

administrators were computed and are reported in Table XXXI (p. 221). To test for overall differences between the means for the three administrators, an analysis of variance for repeated measures (3, p. 112) was calculated. The summary of the analysis of variance reported in Table XXXI (p. 221) reveals that the differences among means were significant at the .01 level. To test for significant differences between all possible pairs of means, a Newman-Keuls test (3, p. 114) was calculated and is reported in Table XXXI (p. 221). The data in this table reveal that teachers perceived the Principal and Vice-Principal to be significantly more sensitive than the Director. There were no significant differences between the teachers' perceptions of the sensitivity of the Principal and the Vice-Principal.

As stated previously, the operative sanctions used by administrators in this system appeared to be a mixture of normative and coercive sanctions (p. 218). Teachers did not perceive that the use of coercive sanctions was related only or primarily to the Principal. A majority of teachers felt that the Principal may initiate action which would result in the use of coercive sanctions, but that all five administrators would be involved in the decision to impose these sanctions. In the perception of a majority of teachers, a request for the forced transfer, or the dismissal of a teacher may originate from the Principal, after consultation with the Vice-Principal. The request would then be submitted to the Superintendent who would make the decision after consultation with the Assistant Superintendent, the Director and the Principal. Although most teachers

TABLE XXXI

TEACHERS' PERCEPTIONS OF ADMINISTRATORS' SENSITIVITY TO
NORMATIVE SANCTIONS

SUMMARY OF ANALYSIS OF VARIANCE					
Source of Deviation	SS	df		MS	F
Between members	57.68	(n-1)	28		
Within members	37.00	n(k-1)	58		
Administrators	9.40	(k-1)	2	4.70	9.59
Residual	27.60	(n-1)(k-1)	56	.49	
Total	94.68	(kn-1)	86		

$$F_{.99}(2, 56) = 5.02$$

$$n = 29 \quad k = 3$$

SUMMARY OF NEWMAN-KEULS TEST FOR DIFFERENCES BETWEEN MEANS

	Means	2.45	2.72	3.24
Administrators	4	5	3	
Principal	4		*	
Vice-Principal	5		**	
Director	3			

* Significant at .01 level.

** Significant at .05 level.

felt that the Principal may initiate the use of coercive sanctions, a majority of teachers insisted that the use of these sanctions did not relate only or primarily to the Principal, but related equally to all five administrators. Thus, all teachers reported that in their own relationships with administrators in this system, all administrators used predominantly normative sanctions (p. 217), and a majority of teachers reported that the use of coercive sanctions was related equally to all five administrators. In the light of this evidence, the hypothesis that the sensitivity of an administrator to the use of normative sanctions by teachers, as perceived by teachers, would be related to the degree that the sanctions used by the administrator to gain the compliance of teachers were perceived by teachers to be predominantly normative may not be tested, and was neither supported nor rejected.

Hypothesis 4.3

As reported previously, all teachers in this system reported that in their own relationships with administrators, all administrators used predominantly normative sanctions (p. 217). All teachers, including the four teachers whose influence relationships with administrators have been classified as negative, reported that the normative sanctions used by administrators were predominantly positive normative sanctions. The four teachers with negative relationships with administrators reported that only on rare occasions were negative normative sanctions used by administrators. However, as reported

previously, the operative sanctions used by administrators appeared to be a mixture of normative and coercive sanctions (p. 218).

According to the data reported in Table XXXII, of the 89 relationships between teachers and administrators which have been classified, 66 were positive or ambivalent relationships. Of the 60 ambivalent relationships, all could be further classified as positive ambivalent relationships. However, there were four negative relationships, and 19 indifferent relationships classified by definition according to the procedure reported previously (p. 181).

TABLE XXXII

INFLUENCE RELATIONSHIPS BETWEEN ADMINISTRATORS AND TEACHERS

	Symmetrical	Asymmetrical	Totals
Positive		6	6
Ambivalent	1	59	60
Negative	4		4
Indifferent	<u> </u>	<u>19</u>	<u>19</u>
Totals	5	84	89

As the operative sanctions used by administrators appeared to be a mixture of normative and coercive sanctions, and as the 19 indifferent relationships between administrators and teachers were classified by definition, the data lacked preciseness and clarity. Because of the lack of preciseness and clarity in the data, the hypothesis that where administrators were perceived by teachers to use

predominantly normative sanctions, the modal influence relationships between teachers and administrators would tend to be positive, or positive ambivalent relationships, to the extent that the normative sanctions used by administrators to gain the compliance of teachers were perceived by teachers to be predominantly positive normative sanctions, may be neither supported nor rejected.

Hypothesis 4.4

Teachers' perceptions of dependency on an administrator were related to the teachers' perceptions of the process of supervision and performance evaluation practiced by the administrator. Teachers reported their performance was evaluated by the Director solely by means of classroom visitation, but the Director confined his visitations to teachers in their probationary year. The majority of teachers felt the Vice-Principal was not really involved in evaluating their teaching performance, although three Science teachers did report that the Vice-Principal had on occasion visited their classrooms to observe the instruction. No teacher reported a visitation by the Superintendent or Assistant Superintendent. Teachers felt these two administrators used the results of the Provincial Department external examinations as a means of assessing their work, but otherwise relied upon the reports of the Principal and the Director.

Teachers reported they felt their performance was evaluated by the Principal in a variety of ways. The teaching methodology used was evaluated by means of classroom visitation. The teachers' relationships

with students seemed to be evaluated by means of classroom visitation, and from feedback from students and parents. The learning of the students seemed to be evaluated through classroom visitation by means of examining student exercises and listening to student responses, and by the results of the Provincial Department external examinations. The Industrial Arts and Home Economics teachers reported that in addition to visitations by the Principal and perhaps the Director, their teaching was inspected once each year by a specialist inspector from the Provincial Department, who issued reports to the teachers concerned, the Principal and the Superintendent. These four teachers agreed that the inspectors from the Provincial Department were influential to some extent, but that a teacher's status in this school and this school district was determined primarily by the Principal. The Commerce teachers reported that the crucial evaluation of the learning of commerce students was made by the Principal on the basis of feedback from the employers of the graduates of the Commerce program. All teachers felt the Department Heads played little if any part in the evaluation of their performance. Twenty-one teachers, or 72 percent of the teachers felt that classroom visitations were primarily a means of evaluation of their performance, rather than a means of helping them to develop professionally.

The Superintendent, Assistant Superintendent, Director and Vice-Principal agreed with the perceptions of the teachers relating to the evaluation of their performance. The Principal agreed substantially with these perceptions, but added that feedback from

Department Heads was used in the evaluation of the methodology of instruction used by teachers, and that feedback from the Vice-Principal, the Department Heads and the Counsellors was used in the evaluation of a teacher's relationships with students.

On the reports from teachers teaching courses on the university entrance program, the average number of visitations by the Principal per year was 3.6. On the reports from teachers teaching non-university entrance program courses, the average number of visitations by the Principal per year was 1.2. The Principal reported that he tried to visit each teacher four or five times per year.

As reported previously, the Principal was required to write a report each year on the performance of each member of the instructional staff of the school (p. 75). Twenty-five teachers, or 86 percent of the teachers had no objection to this practice, while all teachers felt that if anyone were going to write a report on their performances, it should be the Principal who was most familiar with their performances. Fifteen teachers, or 52 percent of the teachers did not know to whom these reports were made available.

Teachers' perceptions of the degree to which their performances were supervised were gained during the personal interview by means of a six point scale ranging from (1) very closely supervised, to (6) very loosely supervised (Appendix B, p. 295). The data reported in Table XXXIII (p. 227) reveal that teachers in this school did not feel they were closely supervised.

Data concerning teachers' perceptions of the degree to which

their present or future status in this school was dependent upon their relationships with each of the five administrators were gained during the personal interview by means of a six point scale ranging from (1) completely dependent, to (6) not at all dependent (Appendix B, p. 298).

TABLE XXXIII
CLOSENESS OF SUPERVISION REPORTED BY TEACHERS

Degree of Supervision	Number of Teachers Reporting
1. Very Closely Supervised	
2. Closely Supervised	
3. Fairly Closely Supervised	1
4. Somewhat Loosely Supervised	13
5. Loosely Supervised	14
6. Very Loosely Supervised	1
	n = 29
Mean	= 4.52
Standard Deviation	= .6

Means for each administrator were computed and are reported in Table XXXIV (p. 228). To test for overall differences among the means for the five administrators, an analysis of variance for repeated measures (3, p. 112) was calculated. The summary of the analysis of variance reported in Table XXXIV (p. 228) reveals that the differences among means for the five administrators were significant at the .01

TABLE XXXIV
TEACHERS' PERCEPTIONS OF THEIR DEPENDENCY ON
FIVE ADMINISTRATORS

SUMMARY OF ANALYSIS OF VARIANCE					
Source of Deviation	SS	df		MS	F
Between members	70.29	(n-1)	28		
Within members	163.60	n(k-1)	116		
Administrators	83.55	(k-1)	4	20.89	29.42
Residual	80.25	(1-1)	(k-1)	112	.71
Total	233.89	(kn-1)	144		

$F_{.99}(4,112) = 3.50$
 $n = 29 \quad k = 5$

SUMMARY OF NEWMAN-KEULS TEST FOR DIFFERENCES BETWEEN MEANS

	Means	1.79	2.83	2.86	3.76	3.90
Administrators	4	1	2	3	5	
Principal	4		*	*	*	*
Superintendent	1				*	*
Assistant Superintendent	2				*	*
Director	3					
Vice-Principal	5					

* Significant at .01 level.

level. To test for significant differences between all possible pairs of means, a Newman-Keuls Test (3, p. 114) was calculated and is reported in Table XXXIV (p. 228). The data in this table reveal that teachers felt significantly more dependent upon the Principal than any of the other four administrators. There were no significant differences between the degree of dependence on the Superintendent and Assistant Superintendent, however teachers felt significantly more dependent on these two administrators than on the Director and Vice-Principal. Apparently the teachers perceived that decisions regarding their present or future status in this school were made by the Superintendent or Assistant Superintendent on the advice of the Principal, and that the Principal's advice would outweigh that of the Director. There were no significant differences between the degree of dependence on the Director and the Vice-Principal.

The influence relationships which existed between teachers and three of the administrators, the Director, the Principal and the Vice-Principal are reported in Table XXXV (p. 231). As reported previously, (p. 187) the Superintendent had only two relationships with teachers, and the Assistant Superintendent had no relationships with teachers. For this reason, relationships between teachers and the Superintendent, and between teachers and the Assistant Superintendent were omitted from Table XXXV, and from any further discussion in this section. The 19 asymmetrical casual relations reported between the Director and teachers were classified by definition according to the procedure reported previously (p. 181).

The hypothesis that the type of influence relationships existing between a teacher and an administrator would be related to the degree that the teacher perceived himself to be dependent upon the administrator, was tested for each of the three administrators considered in this section, the Director, the Principal and the Vice-Principal. Point biserial correlation coefficients (1, p. 199) were calculated to test the relatedness of the teachers' perceived degree of dependence on each of the three administrators, and dichotomies of the influence relationships which existed between the teachers and each of the three administrators. Data concerning the degree to which teachers perceived themselves to be dependent upon each of the three administrators were gained during the personal interview by means of a six-point scale ranging from (1) completely dependent, to (6) not at all dependent (Appendix B, p. 298).

The influence relationships between teachers and the Director were dichotomized by combining the category submission to an institutional figure and the category avoidance—strain to form one part of the dichotomy. According to Schermerhorn, both of these categories are characterized by a certain amount of constraint on the part of at least one member of the pair. The asymmetrical category of casual relations, which has the emotional accompaniment of neutrality was used to form the second part of the dichotomy.

Two point biserial correlation coefficients were calculated using two different dichotomies of the influence relationships between teachers and the Principal. In the first dichotomy, the category of

TABLE XXXV
RELATIONSHIPS BETWEEN INFLUENCE RELATIONSHIPS AND
DEGREE OF DEPENDENCY

Categories of Influence Relationships	Director	Principal	Vice- Principal
Member	3	4	5
6, Charisma		6	
9, Ambivalent		1	
10, Submission Because of Group Norms			4
11, Submission to Rational Expert		12	5
12, Submission to Institutional Figure	9	9	20
13, Casual Relations (Asymmetrical)	19		
14, Avoidance--Strain	1	1	
Totals	29	29	29

POINT BISERIAL CORRELATION COEFFICIENTS BETWEEN TEACHERS' INFLUENCE
RELATIONSHIPS WITH ADMINISTRATORS, AND TEACHERS' PERCEIVED
DEGREE OF DEPENDENCY ON ADMINISTRATORS

	r pbi	t
Director (a)	.092	.502
Principal (b)	.090	.446
Principal (c)	.208	1.215
Vice-Principal (d)	.246	1.472
Vice-Principal (e)	.297	1.841

$$t (27) \ .95 = 2.052$$

DICHOTOMIES OF INFLUENCE RELATIONSHIPS USED IN CALCULATING
POINT BISERIAL CORRELATION COEFFICIENTS

(a) Categories 12 and 14.	:	Category 13,
(b) Category 6.	:	Categories 9, 11, 12, 14
(c) Categories 6, 9 and 11.	:	Categories 12, 14
(d) Category 10.	:	Categories 11, 12
(e) Categories 10 and 11.	:	Category 12.

charisma, characterized by the compliant member of the pair having the emotional accompaniment of attraction and spontaneity, was used to form one part of the dichotomy. The symmetrical categories of ambivalent relations and avoidance—strain were combined with the asymmetrical categories of submission to a rational expert, and submission to an institutional figure to form the other part of the dichotomy. These four categories are characterized by a certain amount of constraint on the part of at least one member of the pair. One part of the second dichotomy was formed by combining the categories of charisma and ambivalent relations, both of which are to some degree positive relationships, with the category submission to a rational expert, which is characterized by the compliant member of the pair having the emotional accompaniment of a certain amount of constraint. The other part of the second dichotomy was formed by combining the category submission to an institutional figure and the category of avoidance—strain. Both of these categories are characterized by a certain degree of constraint on the part of at least one member of the pair.

Two point biserial correlation coefficients were calculated using two different dichotomies of the influence relationships between teachers and the Vice-Principal. One part of the first dichotomy was formed by the category submission to a dominant figure who embodies informal group norms. The other part of the first dichotomy was formed by combining the categories submission to a rational expert and submission to an institutional figure. All three of these categories

are characterized by the compliant member of the pair having the emotional accompaniment of some degree of constraint. One part of the second dichotomy was formed by combining the categories, submission to a dominant figure who embodies informal group norms and submission to a rational expert. The category submission to an institutional figure was used to form the other part of the second dichotomy.

The dichotomies used in the calculation of the five point biserial correlation coefficients are reported in Table XXXV (p. 231). The point biserial correlation coefficients, and the t's calculated to test the significance of the coefficients are also reported in Table XXXV. No significant relationships were found between teachers' perceived degree of dependence on an administrator, and the influence relationships between teachers and an administrator. According to these data, the hypothesis that the type of influence relationship existing between a teacher and an administrator would be related to the degree that the teacher perceived himself to be dependent upon the administrator, could not be supported.

Summary of Hypotheses Under Sub-Problem 4.0

Hypothesis 4.1, that the sanctions used by administrators to gain the compliance of teachers was perceived by teachers to be predominantly normative rather than remunerative or coercive was not supported. All teachers reported that in their own relationships with administrators, all administrators used predominantly normative sanctions. However, all teachers reported knowledge of coercive

sanctions having been imposed by administrators on teachers. Sixty-two percent of the teachers reported that the latent threat of the use of coercive sanctions did affect their behaviour. Therefore teachers perceived the operative sanctions used by administrators in this system to be a mixture of normative and coercive sanctions.

Hypothesis 4.2, that the sensitivity of an administrator to the use of normative sanctions by teachers, as perceived by teachers, would be related to the degree that the sanctions used by the administrator to gain the compliance of teachers were perceived by teachers to be predominantly normative was not tested, and was neither supported nor rejected. Because of the lack of interaction between the Superintendent and the Assistant Superintendent and teachers, teachers had neither perceptions of the use of sanctions by, nor the sensitivity of these two administrators. The Principal and the Vice-Principal were significantly more sensitive to the use of normative sanctions than was the Director. A majority of teachers perceived the use of coercive sanctions to be related equally to all administrators. Therefore, the hypothesis was not tested.

Hypothesis 4.3, that where administrators were perceived by teachers to use predominantly normative sanctions, the modal influence relationships between teachers and administrators would tend to be positive, or positive ambivalent relationships, to the extent that the normative sanctions used by administrators to gain the compliance of teachers were perceived by teachers to be predominantly positive normative sanctions, was neither supported nor rejected. As the

operative sanctions used by administrators were perceived by teachers to be a mixture of normative and coercive sanctions, and as a number of asymmetrical indifferent relationships between teachers and administrators were classified by definition, the data lacked preciseness and clarity. Because of the lack of preciseness and clarity in the data, the Hypothesis was not tested.

Hypothesis 4.4, that the type of influence relationship existing between a teacher and an administrator would be related to the degree that the teacher perceived himself to be dependent upon the administrator was not supported.

BIBLIOGRAPHY, CHAPTER VIII

- (1) Ferguson, G. A., Statistical Analysis in Psychology and Education, (Toronto, McGraw-Hill Book Co. Inc., 1959).
- (2) Schermerhorn, R. A., Society and Power, (New York, Random House, 1961).
- (3) Winer, B. J., Statistical Principles in Experimental Design, (Toronto, McGraw-Hill Book Co. Inc., 1962).

CHAPTER IX

SUMMARY AND CONCLUSIONS

Purpose of the Study

The purpose of this study was to gain an understanding of the functions of a Canadian Public Secondary School as an example of a complex organization by using a specific concept of influence and some concepts of organization theory in the investigation of the inter-personal influence relationships existing among members of the organization by means of which the purposes and processes of the organization were related. The problem was stated more specifically in terms of four sub-problems:

1.0 What is the nature of the influence structures existing within the organization?

2.0 What is the relationship of the informal primary groups in the organization to the influence structures existing within the organization?

3.0 What is the nature of the modal influence relationships existing within the organization?

4.0 What is the nature of the relationships between teachers and administrators within the organization?

The method of investigation consisted of four distinct steps:

1. Determining the formal structure of the organization by reference to legislation, Board policy, and by interviewing the administrators of the system.

2. Gathering data on interpersonal relationships by means of a questionnaire.

3. Gathering data on each interpersonal relationship in the system by means of a personal interview with each member of the system based upon the data gathered by means of the questionnaire.

4. The analysis of the data.

The summary and conclusions of this study will be discussed under the headings of the four sub-problems.

Sub-Problem 1.0

According to the evidence revealed in this study, the methodology developed by Blocker et al. of treating data on each of three dimensions of influence is a research technique useful in the analysis of influence structures of organizations. The three dimensions of influence used were communication, reliance, and attributed influence. With the necessary correction to the calculation of the weights on the reliance dimension (1, p. 107), the tracing of the secondary and tertiary relationships through simple matrix manipulation, and the inclusion of these secondary and tertiary relationships in the calculation of the weights on the communication and reliance dimensions was considered to be sound, providing a more realistic measurement than would be obtained by using primary relationships only.

Members' rankings on these three dimensions were found to be significantly related, supporting the assumption that these were

dimensions of a single concept, and yet members' rankings on the three dimensions were not entirely congruent. The separate rankings of each member on each dimension provided useful data on each member, and helped to explain why certain members who appeared to be influential were not, according to the theory underlying this methodology, classified as being influential. Each dimension could be analysed separately, if desired, delineating and making available for study a communication structure, a reliance structure and an attributed influence structure.

The use of the three dimensions was particularly useful in this study, providing the basic data for the further categorization of relationships according to Schermerhorn's Schema.

This methodology could be used to study influence relationships relating to any specific issues which may arise in, or any specified task processes found in an organization. The more clearly task processes are delineated, and the greater the number of task processes delineated for study, the more complete will be the analysis of the functional processes of the organization. The rankings assigned to specific members could be accounted for in most cases by means of information gathered during the personal interview, and information relating to the formal structure, the role definitions of members, and the decision-making processes of the organization. This tended to verify the data collected by means of the questionnaire, and the calculation of weights on each dimension. This also tended to support the assumption that data gained by these means may be used to provide

an accurate description of the communication, reliance and attributed influence structures of an organization. The rankings of the members on the same dimensions of the twelve Task Topics used in this study were found to be significantly related across all twelve Task Topics, indicating general communication, reliance and attributed influence structures common to all Task Topics. However, different influence structures were found for each of the Task Topics for which data were gathered. Only one member of the system was classified as being an influential on all twelve Task Topics.

The method of categorizing influentials used in this study was considered to be useful in determining the few most influential members on each Task Topic. However, it is not suggested that this method of categorization should be adopted for all purposes. If it is desired to classify influentials, the method of classification may be altered to suit the purpose, and the data available.

Sub-Problem 2.0

The sociometric analysis of the social, friendship and conflict relationships among members added significant data to the complete analysis of the system.

All but six members of the school staff were found to be members of one integrated primary social group. The social structure tended to be incongruent with the influence structures in several ways. The Principal, who was highly influential on all Task Topics had only two social links. The Vice-Principal, who was influential on most Task

Topics had only three social links. The Department Head who was influential on eight of the twelve Task Topics, and appeared to be the most influential Department Head generally, had only two social links, while five of the seven Department Heads had four or more social links. The communication, reliance and attributed influence links on the twelve Task Topics tended to be between members having similar specialized work orientations, while the social links did not follow this tendency to the same extent. The English and Social Studies teachers tended to group socially, while the Science, Mathematics and Commerce teachers tended to group socially. The female members of the staff were generally well integrated into the communication, reliance and attributed influence structures, but tended to be more segregated in the social structure, forming a sub-group within the large social group. The two teachers who appeared to be the most influential teachers in matters pertaining directly to instruction, also were two of the main centres of social interaction.

The identification of the conflict relationships provided valuable data revealing the types of conflicts which can arise, and which can be accommodated in this type of organization. The majority of conflicts reported arose over salary negotiations. It is not suggested that this analysis revealed all of the conflicts which have arisen in this organization over the past two or three years. Based upon the reports of respondents during the personal interview, it is assumed that conflicts which could not be resolved or accommodated within the system have been resolved by the removal of at least one

member of the conflict from the system. The removal could be accomplished by a member resigning, or requesting a transfer to another school, or by the forced transfer of a member to another school. Information relating to the number of forced transfers of members from this school during the past three years was not made available. Where a conflict had been resolved by the removal of one member of the conflict from the system, the conflict would not be reported by the respondents, and would not appear in this study.

The analysis of social, friendship and conflict relationships provided useful data for the categorization of influence relationships according to Schermerhorn's Schema.

Sub-Problem 3.0

It is the opinion of this researcher that Schermerhorn's concepts of influence, power and authority, and the concepts underlying his typology of influence relationships are sound, and useful in ordering data in empirical research.

It was found there were insufficient categories in Schermerhorn's Schema to describe adequately the relationships found in this organization. Therefore, Schermerhorn's Schema was revised by the addition of four symmetrical categories while retaining all of the categories in the original schema. It is not suggested that the revised schema would be suitable for the analysis of organizations generally, as the revision was made to suit the relationships discovered in the particular organization under study. However, it would appear that if care is taken so

that the concepts underlying Schermerhorn's Schema are not violated, it may be revised to be suitable for the study of any organization.

Of Schermerhorn's original categories, all were found to be sufficiently discrete for the ordering of relationships, with the exception of the asymmetrical category named Modeling After the Person, (Idealization). This was the only category not used to order data in this study. As Schermerhorn pointed out, this is a marginal category, falling between Popularity and Charisma (4, p. 5). Because of this marginality, the usefulness of this category in empirical research is doubtful. Of the categories added to form the revised schema, the two categories named Mutual Friendship, and Mutual Regard Based on Expertise appeared to be insufficiently discrete, resulting in a loss of descriptive data. Contrary to Schermerhorn's statement (4, p. 4), far more symmetrical than asymmetrical relationships were discovered in this system.

The large amount of data required to identify and categorize influence relationships using Schermerhorn's Schema may limit the operational value of carrying out this procedure. In this study, much of the necessary data were gathered and was useful for other purposes. However, it would appear that a personal interview with each member of a system would be required to gather sufficient data to categorize influence relationships with any degree of accuracy. The categorization of influence relationships added useful data to the complete analysis of the system.

Sub-Problem 4.0

The most influential member of this system appeared to be the Principal, who also appeared to be the only administrator or coordinator in the system who had accepted the role of being actively engaged in the improvement of instruction and the fostering of innovation.

The Superintendent and Assistant Superintendent were largely removed from interaction with members of the school staff, with the exception of the Principal. The Superintendent's activities were largely confined to financial and legal problems, and the development of the educational facilities of the school district as a whole. Although the Assistant Superintendent was responsible for all matters pertaining to instruction, and for the administrative and teaching personnel of all schools in the district, there was little interaction between him and the Principal, who on many matters appeared to by-pass the Assistant Superintendent to deal directly with the Superintendent. The Superintendent appeared to defer to some extent to the Principal because of his regard for the Principal's expertise.

The Director appeared to have little influence in this system. He did not appear to derive much influence from his performance in the regulatory role of inspector which he had defined as his primary role. He appeared to assess the relative amount of influence he exerted accurately, and he did not desire to be more influential.

The Principal had an imposing array of influence resources. Academically, he was the most highly trained member in the system. He

did not have control over, but did exercise considerable influence in the original selection and appointment of members to the staff of the school. He had control over the assignment of teaching tasks to all members of the school staff, virtual control over the annual appointment of Department Heads on the school staff, and seemed to have control over the forced transfer of members from the school staff. He had control over all organizational decision-making processes within the school, delegating responsibility as he saw fit. He was the only administrator or coordinator actively engaged in the general supervision of the performance of teachers related to instruction.

There was much evidence to suggest that the Principal used his influence resources skillfully. The Superintendent, the Assistant Superintendent, the Director, and all members of the school staff felt this was an excellent school. He was respected for his expertise by the Superintendent, the Assistant Superintendent, the Director, five of the seven Department Heads, and at least 59 percent of the teachers in the school. He had generally pleasant relationships with the members of the school staff, and had had conflicts with only three members of the school staff. The members of the staff were satisfied with the organization of the school and with the direction of the influence of those members perceived to be influential. The members did not feel closely supervised, and were satisfied with the degree to which their professional competence was used in organizational planning. They felt their present and future status as members of this school staff were highly dependent upon their relationships with the Principal.

The members of the staff did not wish to leave this school.

The Principal appeared to have been successful in establishing as norms, accepted by the members of the staff, a high regard for expertise, excellence of performance, and the desirability of innovation. He appeared to be successful through the use of a mixture of normative and coercive sanctions. The use of sanctions perceived by the members of the staff to be coercive, seems to be contrary to the assumptions of Etzioni in regard to an organization of this type (3, p. 14, 74).

Etzioni states that,

Organizations that serve cultural goals have to rely on normative powers because the realization of their goals requires positive and intense commitments of lower participants to the organization—at least to its representatives, and such commitments cannot be effectively attained by other powers (3, p. 82).

Etzioni further suggests that the use of coercive sanctions makes identification of members with the organizational representatives very unlikely, and discusses the likelihood of the use of coercive sanctions resulting in the alienation of members from the organization, or the representatives of the organization. In the organization studied, this certainly had not happened. The members of this organization were not alienated from the organization or the representatives of the organization. On the contrary, the members of the organization were satisfied with all aspects of the organization, and the latent threat of the use of coercive sanctions by the Principal appeared to be a potent factor in the members' acceptance of the norms desired by the Principal. If questions were raised concerning the extent to which the latent threat

of the use of coercive sanctions was functional, and the extent to which the latent threat of coercive sanctions was dysfunctional, the answer would appear to be that in conjunction with a number of other organizational factors, the latent threat of coercive sanctions was highly functional. This would suggest that in conjunction with a number of other organizational factors, there would be an optimal mix of normative and coercive sanctions in organizations of this type.

The Vice-Principal worked closely with the Principal, but his activity was largely confined to the mechanical day-to-day operations of the school, freeing the Principal to use a significant portion of his resources in matters relating directly to instruction. The Vice-Principal's responsibilities and authority were delegated by the Principal who retained control over all policy decisions.

Supervisors were not active in relation to this school, reporting their activities this year had been largely confined to grades eight and nine. Of the twelve Task Topics in the set, they were most influential in matters relating to the provision of facilities and supplies for instruction, acting as specialist advisors to the Assistant Superintendent in these matters.

The Department Heads functioned primarily in the capacity of an advisory cabinet to the Principal on a restricted number of Task Topics, and in carrying out the minor administrative tasks relating to their departments. They were not actively engaged in attempting to improve the quality of instruction of the teachers in their departments, nor in

introducing, developing or improving the methodology of instruction used by the members of their departments. In several cases they were not highly regarded for their expertise by the members of their departments. Department Heads seemed to gain much of their influence from their interaction with the Principal, rather than from their interaction with the members of their departments.

Because of the organization of this school, the two Counsellors were highly influential members of the staff. On many Task Topics they worked closely with the Principal and Vice-Principal. In acting as the liaison personnel between home and school they were in frequent contact with the two school administrators and virtually every member of the school staff.

As reported previously under this heading, the teachers were quite satisfied with the organizational practices in this school. The teachers were willing to accept organizational restrictions on their behaviour in each of the Task Topics studied. However teachers did desire more influence in relation to eight of the twelve Task Topics. They desired most influence, and more influence than they presently had, in matters relating directly to instruction. Teachers felt the restrictions in these matters were not imposed by administrators in this system, but resulted from the curriculum demands and external examinations imposed by the Provincial Department. Teachers also desired more influence on matters relating to the selection of courses to be offered, the distribution of instructional time, and the time-table

scheduling of teachers and pupils; the provision of facilities, equipment and supplies for instruction; the allocation of teaching assignments; the establishment of student evaluation practices; and student accounting practices. In all of these matters, certain restrictions were imposed by legislation, by the Provincial Department and by the School Board. However all were organizational matters falling under the responsibility of the Principal, who had considerable freedom of action in all organizational matters pertaining to his school.

The two teachers who appeared to be the most influential teachers in matters relating directly to instruction, were also two main centres of social interaction, had the greatest number of friendship links, and the greatest number of conflict relationships. One of these teachers had been in conflict with the Principal, and had a symmetrical ambivalent relationship with the Principal. As far as could be determined in this study, the degree to which a teacher felt his present and future status as a member of this staff were dependent upon his relationship with an administrator, was not related to the type of influence relationship existing between the teacher and the administrator.

Implications for Further Research

The discussion of implications for further research will be confined largely to implications relating to educational organizations, and public school organizations in particular.

It would appear that the methodology used in this study, or an

adaptation of the methodology made to meet the restrictions of situational factors, would be useful as a means to study the influence structures of an organization for purposes of assessing the functionality of the processes studied, or the influence exerted by specific members of the organization. It is not suggested that the criteria to be used in making judgments of the functional processes of an organization are revealed in this study. In the assessment of any particular organization, the delineation of the criteria to be used in making judgments, and the assumptions underlying these criteria would be related to the purposes of the organization generally, or to the purposes of any particular functional process studied.

As organization theory, and the study of organizational behaviour are concerned with the interaction of personnel in organizations, they are concerned with the availability and use of influence resources by members of organizations. It is suggested that studies of public school organizations focused on the availability and use of influence resources by members in the organizations would provide empirical data useful in the development of organization theory, and specifically useful to students of educational administration and to educational administrators. It would be useful to have more knowledge of the influence resources that are available to educational administrators in different contexts, and the relative skill with which educational administrators use the influence resources that are available. It would be useful to have more knowledge of the influence resources available to members of the organization other than

administrators and the relative skill with which these resources are used. Knowledge such as this would permit a better understanding of the relation between the availability and use of resources by administrators and the availability and use of resources by other members of the organization. It is suggested that the availability and use of resources would depend upon a number of variables and would differ in different organizational contexts. Some variables which would seem to be pertinent are, restrictions imposed by provincial or state authorities, the size, wealth, sociological and demographical characteristics of the school district, the school district organizational structure, the size and purpose of the school, the sociological characteristics of the school clientel, the organization of the school, the methodology of instruction used in the school, and the characteristics of the personnel in the system. It seems to be obvious that if the availability and use of resources differ according to different physical and sociological contexts, different organizational structures and different personnel characteristics, then the influence structures and patterns of influence relationships would differ in different organizational contexts.

It would be fruitful to be able to define more clearly the degree to which sanctions used by administrators affect the behaviour of other members of the organizations in different organizational contexts. Studies of this kind would require more sensitive instrumentation than that used in this study. More empirical knowledge is needed to delineate the extent to which the use of various normative

sanctions by administrators affects the behaviour of members. The degree to which members perceive certain sanctions as being coercive, and the degree to which, as well as the direction in which, members' behaviour is modified by the use of these sanctions would be useful empirical knowledge. In this study, teachers reported that the remunerative aspects of sanctions were not operative. It would be useful to ascertain with more certainty the degree to which remunerative sanctions, or the remunerative aspects of sanctions do modify behaviour. As revealed in this study, sanctions may be perceived by members as having normative, remunerative and coercive aspects. It would be useful to know the degree to which various combinations of sanctions modify the behaviour of members. It is not suggested that the use of, and the effects of the use of sanctions should be studied only in a unidirectional sense, as applied by administrators to modify the behaviour of other members. It seems to be obvious that it is equally essential to study the use of, and the effects of the use of sanctions as applied by members to modify the behaviour of administrators or of other members.

As revealed in this study, Schermerhorn's typology of influence relationships and the concepts underlying this typology seem to be useful as means of ordering data in the empirical analysis of organizational relationships. However, the degree to which this typology is useful, and the degree to which the typology may be modified because of situational factors found in different organizational contexts and still retain its usefulness, should be verified by use in further empirical research.

BIBLIOGRAPHY, CHAPTER IX

- (1) Blocker, C. E., and R. H. McCabe, Relationships Between the Informal Organization and the Curriculum in Six Junior Colleges, (Austin, Texas, 1964).
- (2) Blocker, C. E., R. H. McCabe, and A. J. Prendergast, A Method for the Sociometric Analysis of the Informal Organization Within Large Work Groups, (Austin, Texas, 1964).
- (3) Etzioni, A., A Comparative Analysis of Complex Organizations, (Glencoe, Illinois, The Free Press, 1961).
- (4) Schermerhorn, R. A., Society and Power, (New York, Random House, 1961).

BIBLIOGRAPHY

BIBLIOGRAPHY

- Allport, F. H., Theories of Perception and the Concept of Structure, New York, Wiley, 1955.
- Allport, F. H., "The J-Curve Hypothesis of Conforming Behaviour," Journal of Social Psychology, 5, 1934, pp. 141-183.
- Argyris, C., Interpersonal Competence and Organizational Effectiveness, Homewood, Illinois, Irwin-Dorsey, 1952.
- Barber, B., Social Stratifications, New York, Harcourt Brace and Co., 1957.
- Barnard, C., The Functions of the Executive, Cambridge, Mass., Harvard University Press, 1938.
- Becker, H., "Notes on the Concept of Commitment," American Journal of Sociology, Vol. 66, 1960, pp. 32-40.
- Bendix, R., and S. N. Lipset, (eds.), Class, Status, and Power, Glencoe, The Free Press, 1953.
- Bennis, W. G., "Leadership Theory and Administrative Behaviour: The Problem of Authority," Administrative Science Quarterly, 4, pp. 259-301, December, 1959.
- Berelson, B. and G. A. Steiner, Human Behaviour, New York: Harcourt, Brace and World, Inc., 1964.
- Beirstadt, R., "An Analysis of Social Power," American Sociological Review, XV, December, 1950.
- Blau, P. M., Bureaucracy in Modern Society, New York, Random House, 1956.
- Blau, P. M., The Dynamics of Modern Society, Chicago, the University of Chicago Press, 1955.
- Blau, P. M. and W. R. Scott, Formal Organizations, San Francisco, Chandler Publishing Company, 1962.
- Blocker, C. E. and R. H. McCabe, Relationships Between the Informal Organization and the Curriculum in Six Junior Colleges, Austin, Texas, 1964.

- Blocker, C. E., R. H. McCabe and A. J. Prendergast, A Method for the Sociometric Analysis of the Informal Organization Within Large Work Groups, Austin, Texas, 1964.
- Brecht, A., Political Theory, Princeton, Princeton University Press, 1959.
- Brecht, A., "How Bureaucracies Develop and Function," Annals of the American Society of Political and Social Science, 292, March, 1954.
- Bronfenbrenner, U., "A Constant Frame of Reference for Sociometric Research: II Experiment and Influence," Sociometry, VII, August, 1964, pp. 283-289.
- Cartwright, P. and A. Zander (eds.) Group Dynamics: Research and Theory, Evanston, Illinois, Row Peterson and Co., 1953.
- Cooper, H. C. "Perceptions of Sub-group Power and Intensity of Affiliation with a Larger Organization," American Sociological Review, Vol. 26, 1961, pp. 272-274.
- Dahl, R. A., Modern Political Analysis, Englewood-Cliffs, New Jersey, Prentice-Hall Inc., 1961.
- Dubin, R., Human Relations in Administration, Englewood-Cliffs, New Jersey, Prentice-Hall inc., 1961.
- De Grazia, S., "What Authority is Not," American Psychological Society Review, LIII, June, 1959, pp. 321-331.
- Eisenstadt, S. N., "Bureaucracy, Bureaucratization and Debureaucratization" in A. Etzioni, Complex Organizations: A Sociological Reader, New York, Holt, Rinehart and Winston, 1961, pp. 268-277.
- Etzioni, A., A Comparative Analysis of Complex Organizations, Glencoe, Illinois, The Free Press, 1961.
- Etzioni, A., Modern Organizations, Englewood-Cliffs, New Jersey, Prentice-Hall Inc., 1964.
- Ferguson, G. A., Statistical Analysis in Psychology and Education, Toronto, McGraw-Hill Book Co., 1959.
- Festinger, L., S. Schacter and K. Back, Social Pressures In Informal Groups, New York, The Research Center for Group Dynamics, Institute for Social Research, University of Michigan, Harper and Brothers, 1950.

- Festinger, L., S. Schacter and K. Back, "A Study of a Rumor: Its Origin and Spread," Human Relations, August, 1948, pp. 464-486.
- French, J. R. P., "A Formal Theory of Social Power," Psychological Review, LXIII, May, 1956, pp. 181-193.
- French, J. R. P. and B. Raven, "The Bases of Social Power," in D. Cartwright, ed., Studies in Social Power, Ann Arbor, Research Center for Group Dynamics, Institute for Social Research, 1959.
- Garrett, H. E., Statistics in Psychology and Education, Toronto, Longmans, Green and Co., 1958.
- Gouldner, M. P., "Dimensions of Organizational Commitments," Administrative Science Quarterly, Vol. 4, 1960, pp. 488-490.
- Griffiths, D. E., "Administrative Theory and Change in Organizations," in B. M. Miles, Innovation in Education, New York, Bureau of Publications, Teachers College, Columbia University, 1964.
- Haire, M., "Biological Models and Empirical Histories of the Growth of Organizations," in M. Haire, Modern Organization Theory, New York, John Wiley and Sons, 1959.
- Hardwick, W. G., and R. J. Baker, Regional College Study, Vancouver, Tantalus Research Limited, 1965.
- Hearn, G., Theory Building in Social Work, Toronto, University of Toronto Press, 1958.
- Hollander, E. P., "Some Effects of Perceived Status on Responses to Innovative Behaviour," Journal of Abnormal and Social Psychology, LXIII, September, 1961, pp. 247-250.
- Homans, G. C., The Human Group, New York, Harcourt, Brace and World Inc., 1950.
- Hovland, I. C., I. L. Janis and H. H. Kelley, Communication and Persuasion, New Haven, Yale University Press, 1953.
- Hunter, F., Community Power Structure, Chapel Hill, University of North Carolina Press, 1953.
- Hurwitz, J. K., A. F. Zander and B. Hymovitch, Some Effects of Power on the Relations Among Group Members, Washington, D.C., The National Institute for Mental Health, United States Public Health Service, 1958.

- Iannacone, L., "The Social System of an Elementary School Staff," (unpublished doctoral dissertation) Teachers College, Columbia University, 1958, reported in D. E. Griffiths, D. Clark, R. Wynn and L. Iannacone, Organizing Schools for Effective Education, Danville, Illinois, The Interstate, 1961.
- Jennings, H. H., "The Significance of Choice in Human Behaviour," in D. Cartwright and A. Zander, (eds.), Group Dynamics, Evanston, Illinois, Row, Peterson and Company, 1960, pp. 62-69.
- Katz, E., "The Two-Step Flow of Communication: An Up-to-Date Report on an Hypothesis," Public Opinion Quarterly, XXI, Spring, 1957, pp. 61-78.
- Kahn, R. L., D. M. Wolfe, R. P. Quinn and J. D. Snoek, Organizational Stress Studies in Role Conflict and Ambiguity, New York, John Wiley and Sons, Inc., 1964.
- Krugman, H. E., "Affective Response to Music as a Function of Familiarity," Journal of Abnormal and Social Psychology, XXXVIII, July, 1943, pp. 388-392.
- Lasswell, H. D. and Kaplan, Power and Society, New Haven, Yale University Press, 1950.
- Low, L. E., "The Identification of Informal Groups and Informal Group Leadership in Selected Schools in Ohio," unpublished doctoral dissertation, Ohio State University, 1962.
- McCleary, L. E., "A Study of Interpersonal Influence Within a School Staff," unpublished doctoral dissertation, University of Illinois, 1957.
- MacKay, D. A., "An Empirical Study of Bureaucratic Dimensions and Their Relation to Other Characteristics of School Organizations," unpublished doctoral dissertation, University of Alberta, 1964.
- Manual of School Law and Rules of the Council of Public Instruction, Victoria, Queen's Printer, Province of British Columbia, 1962.
- March, J. C. and M. A. Simon, Organizations, New York, John Wiley and Sons, Inc., 1958
- Menzel, H. and E. Katz, "Social Relations and Innovation in the Medical Profession," Public Opinion Quarterly, XIX, Winter 1955-56, pp. 337-352.

- Merriman, C. E., Political Power, New York, McGraw-Hill Co., 1934.
- Mills, C. Wright, The Power Elite, New York, the Oxford University Press, 1959.
- Moeller, G. H., "Bureaucracy and Teachers' Sense of Power," in Administrator's Notebook, Vol. XI, No. 3, November, 1962.
- Moreno, J. L., Who Shall Survive, New York, Beaver House, Inc., 1953.
- Newstadt, R. F., Presidential Power, New York, John Wiley and Sons, Inc., 1960.
- Parsons, T., Structure and Processes in Modern Societies, Glencoe, Illinois, The Free Press, 1960.
- Peabody, R. E., "Authority in Organizations," unpublished doctoral dissertation, Stanford University, 1960.
- Pepitone, A., "Motivational Effects in Social Perception," Human Relations III, February, 1950, pp. 57-76.
- Presthus, R. V., "Toward a Theory of Organizational Behaviour," American Sociological Quarterly, III, June, 1958, pp. 48-72.
- Roethlisberger, F. J., and W. J. Dickson, Management and the Worker, Cambridge, Harvard University Press, 1956.
- Rose, A. M., "Rumors in the Stock Market," Public Opinion Quarterly, XV, No. 3, 1951, pp. 461-486.
- Schermerhorn, R. A., Society and Power, New York, Random House, 1961.
- Scott, W. G., "Organization Theory: an Overview and an Appraisal," in J. A. Litterer, (ed.), Organizations: Structure and Behaviour, New York, John Wiley and Sons, Inc., 1963.
- Seigel, S., Nonparametric Statistics for the Behavioural Sciences, Toronto, McGraw-Hill Book Co., 1956.
- Simon, H. A., Administrative Behaviour, New York, MacMillan Company, 1961.
- Simon, H. A., D. W. Smithbury and V. A. Thompson, Public Administration, New York, Alfred A. Knopf, 1958.

Thibaut, J. W., "An Experimental Study of the Cohesiveness of Underpriveleged Groups," Human Relations, III, February, 1950, pp. 251-278.

Trask, A. E., "Principals, Teachers and Supervision: Dilemmas and Solutions," Administrator's Notebook, Vol. XIII, No. 4, December, 1964.

von Bertalanffy, L., "An Outline of General Systems Theory," British Journal of Philosophical Science, I, 1950.

Weber, M., The Theory of Social and Economic Organization, A. M. Henderson and Talcott Parsons (translators) and Talcott Parsons (ed.), Glencoe, Illinois, The Free Press and Falcon's Wing Press, 1947.

Weiss, R. S. and E. Jacobson, "A Method for the Analysis of the Structure of Complex Organizations," in A. Etzioni, Complex Organizations: A Sociological Reader, New York, Holt, Rinehart and Winston, 1961, pp. 453-454.

Winer, B. J., Statistical Principles in Experimental Design, Toronto, McGraw-Hill Book Co., 1956.

Zander, A., A. R. Cohen, E. Stotland, "Power Relations Among Professions," in D. Cartwright, (ed.) Studies in Social Power, Ann Arbor, Research Center for Group Dynamics, Institute for Social Research, University of Michigan, 1959, pp. 15-34.

APPENDICES

APPENDIX A

INTERPERSONAL RELATIONSHIPS
QUESTIONNAIRE

Personnel Identification Number _____
 Marital Status _____ Sex _____ Date of Birth _____
 Appointment Status _____
 Subjects Taught _____
 Teaching Certificate Held _____ University Degrees Attained _____
 Years of Teaching Experience in This School _____
 Years of Teaching Experience in This School District _____
 Total Years of Teaching Experience _____

INTRODUCTION.

This school has been selected to take part in a research project being conducted under the supervision of the Department of Educational Administration, Faculty of Education, at the University of Alberta. The general areas being investigated are communication networks, influence structures, and the involvement of members.

The researcher wishes to express his appreciation for your cooperation in helping to secure information which it is believed will add significant knowledge to the theory of organizations and to the field of education.

The information obtained will be coded. Each individual will remain anonymous. Data on individuals will not be available to the administration of this school, of this school district, or of the Department of Education of this province.

DIRECTIONS.

The validity of the conclusions which can be drawn from the information obtained is contingent upon the accuracy of your responses. Your responses should be based upon your experiences and your perceptions of situations.

In answering the questions in this booklet, choose as few or as many names as you feel are necessary to reply fully. Make all selections from the List of Personnel provided with this booklet. After each question circle the number or numbers which correspond to your choices. If you can not make any choices circle "none".

The interviewer will answer any questions which you may have concerning the definitions of terms or the phrasing of sentences.

THERE ARE SIX POSSIBLE RESPONSES TO THE FOLLOWING THREE ITEMS:

- (1) Very Satisfied (VS)
- (2) Satisfied (S)
- (3) Fairly Well Satisfied (FWS)
- (4) Somewhat Satisfied (SS)
- (5) Dissatisfied (D)
- (6) Very Dissatisfied (VD)

A.4

By circling the appropriate response indicate your satisfaction or dissatisfaction with the fact that the individuals indicated in A.3 above exercise such influence.

- (1) VS (2) S (3) FWS (4) SS (5) D (6) VD

A.5

By circling the appropriate response indicate your satisfaction or dissatisfaction with the direction of the influence exercised by the individuals indicated in A.3 above.

- (1) VS (2) S (3) FWS (4) SS (5) D (6) VD

A.6

By circling the appropriate response indicate your satisfaction or dissatisfaction with the influence you are able to exert on this topic.

- (1) VS (2) S (3) FWS (4) SS (5) D (6) VD

B.1

With which individuals do you normally discuss matters pertaining to the provision of facilities, equipment and supplies for instruction?

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40	41	42	43	44	45
46	47	48	49	50	NONE									

B.2

Indicate the individuals from whom you would seek advice pertaining to the provision of facilities, equipment and supplies for instruction.

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40	41	42	43	44	45
46	47	48	49	50	NONE									

B.3

Indicate the individuals who appear to be influential in matters pertaining to the provision of facilities, equipment and supplies for instruction. Do not forget to consider yourself.

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40	41	42	43	44	45
46	47	48	49	50	NONE									

THERE ARE SIX POSSIBLE RESPONSES TO THE FOLLOWING THREE ITEMS:

- (1) Very Satisfied (VS)
- (2) Satisfied (S)
- (3) Fairly Well Satisfied (FWS)
- (4) Somewhat Satisfied (SS)
- (5) Dissatisfied (D)
- (6) Very Dissatisfied (VD)

B.4

By circling the appropriate response indicate your satisfaction or dissatisfaction with the fact that the individuals indicated in B.3 above exercise such influence.

- (1) VS (2) S (3) FWS (4) SS (5) D (6) VD

B.5

By circling the appropriate response indicate your satisfaction or dissatisfaction with the direction of the influence exercised by the individuals indicated in B.3 above.

- (1) VS (2) S (3) FWS (4) SS (5) D (6) VD

B.6

By circling the appropriate response indicate your satisfaction or dissatisfaction with the amount of influence you are able to exercise on this topic.

- (1) VS (2) S (3) FWS (4) SS (5) D (6) VD

THERE ARE SIX POSSIBLE RESPONSES TO THE FOLLOWING THREE ITEMS:

- (1) Very Satisfied (VS)
- (2) Satisfied (S)
- (3) Fairly Well Satisfied (FWS)
- (4) Somewhat Satisfied (SS)
- (5) Dissatisfied (D)
- (6) Very Dissatisfied (VD)

C.4

By circling the appropriate response indicate your satisfaction or dissatisfaction with the fact that the individuals indicated in C.3 above exercise such influence.

- (1) VS (2) S (3) FWS (4) SS (5) D (6) VD

C.5

By circling the appropriate response indicate your satisfaction or dissatisfaction with the direction of the influence exercised by the individuals indicated in C.3 above.

- (1) VS (2) S (3) FWS (4) SS (5) D (6) VD

C.6

By circling the appropriate response indicate your satisfaction or dissatisfaction with the amount of influence you are able to exercise on this topic.

- (1) VS (2) S (3) FWS (4) SS (5) D (6) VD

THERE ARE SIX POSSIBLE RESPONSES TO THE FOLLOWING THREE ITEMS:

- | | | |
|-----|-----------------------|-------|
| (1) | Very Satisfied | (VS) |
| (2) | Satisfied | (S) |
| (3) | Fairly Well Satisfied | (FWS) |
| (4) | Somewhat Satisfied | (SS) |
| (5) | Dissatisfied | (D) |
| (6) | Very Dissatisfied | (VD) |

D.4

By circling the appropriate response indicate your satisfaction or dissatisfaction with the fact that the individuals indicated in D.3 above exercise such influence.

- (1) VS (2) S (3) FWS (4) SS (5) D (6) VD

D.5

By circling the appropriate response indicate your satisfaction or dissatisfaction with the direction of the influence exercised by the individuals indicated in D.3 above.

- (1) VS (2) S (3) FWS (4) SS (5) D (6) VD

D.6

By circling the appropriate response indicate your satisfaction or dissatisfaction with the amount of influence you are able to exercise on this topic.

- (1) VS (2) S (3) FWS (4) SS (5) D (6) VD

THERE ARE SIX POSSIBLE RESPONSES TO THE FOLLOWING THREE ITEMS:

- | | |
|---------------------------|-------|
| (1) Very Satisfied | (VS) |
| (2) Satisfied | (S) |
| (3) Fairly Well Satisfied | (FWS) |
| (4) Somewhat Satisfied | (SS) |
| (5) Dissatisfied | (D) |
| (6) Very Dissatisfied | (VD) |

E.4

By circling the appropriate response indicate your satisfaction or dissatisfaction with the fact that the individuals indicated in E.3 above exercise such influence.

- (1) VS (2) S (3) FWS (4) SS (5) D (6) VD

E.5

By circling the appropriate response indicate your satisfaction or dissatisfaction with the direction of the influence exercised by the individuals indicated in E.3 above.

- (1) VS (2) S (3) FWS (4) SS (5) D (6) VD

E.6

By circling the appropriate response indicate your satisfaction or dissatisfaction with the amount of influence you are able to exercise on this topic.

- (1) VS (2) S (3) FWS (4) SS (5) D (6) VD

F.1

With which individuals do you normally discuss matters pertaining to the organization of pupils for instruction within the classes which you teach?

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40	41	42	43	44	45
46	47	48	49	50	NONE									

F.2

Indicate the individuals from whom you would seek advice concerning the organization of pupils for instruction within the classes which you teach.

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40	41	42	43	44	45
46	47	48	49	50	NONE									

F.3

Indicate the individuals who appear to be influential in matters pertaining to the organization of pupils for instruction within the classes which you teach. Do not forget to consider yourself.

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40	41	42	43	44	45
46	47	48	49	50	NONE									

THERE ARE SIX POSSIBLE RESPONSES TO THE FOLLOWING THREE ITEMS:

- | | |
|---------------------------|-------|
| (1) Very Satisfied | (VS) |
| (2) Satisfied | (S) |
| (3) Fairly Well Satisfied | (FWS) |
| (4) Somewhat Satisfied | (SS) |
| (5) Dissatisfied | (D) |
| (6) Very Dissatisfied | (VD) |

F.4

By circling the appropriate response indicate your satisfaction or dissatisfaction with the fact that the individuals indicated in F.3 above exercise such influence.

- (1) VS (2) S (3) FWS (4) SS (5) D (6) VD

F.5

By circling the appropriate response indicate your satisfaction or dissatisfaction with the direction of the influence exercised by the individuals indicated in F.3 above.

- (1) VS (2) S (3) FWS (4) SS (5) D (6) VD

F.6

By circling the appropriate response indicate your satisfaction or dissatisfaction with the amount of influence you are able to exercise on this topic.

- (1) VS (2) S (3) FWS (4) SS (5) D (6) VD

THERE ARE SIX POSSIBLE RESPONSES TO THE FOLLOWING THREE ITEMS:

- | | | |
|-----|-----------------------|-------|
| (1) | Very Satisfied | (VS) |
| (2) | Satisfied | (S) |
| (3) | Fairly Well Satisfied | (FWS) |
| (4) | Somewhat Satisfied | (SS) |
| (5) | Dissatisfied | (D) |
| (6) | Very Dissatisfied | (VD) |

G.4

By circling the appropriate response indicate your satisfaction or dissatisfaction with the fact that the individuals indicated in G.3 above exercise such influence.

- (1) VS (2) S (3) FWS (4) SS (5) D (6) VD

G.5

By circling the appropriate response indicate your satisfaction or dissatisfaction with the direction of the influence exercised by the individuals indicated in G.3 above.

- (1) VS (2) S (3) FWS (4) SS (5) D (6) VD

G.6

By circling the appropriate response indicate your satisfaction or dissatisfaction with the amount of influence you are able to exercise on this topic.

- (1) VS (2) S (3) FWS (4) SS (5) D (6) VD

H.1

With which individuals do you normally discuss matters pertaining to the grading of pupils, and the promotion of pupils?

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40	41	42	43	44	45
46	47	48	49	50	NONE									

H.2

Indicate the individuals from whom you would seek advice concerning the grading of pupils, and the promotion of pupils.

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40	41	42	43	44	45
46	47	48	49	50	NONE									

H.3

Indicate the individuals who appear to be influential in matters pertaining to the grading of pupils and the promotion of pupils. Do not forget to consider yourself.

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40	41	42	43	44	45
46	47	48	49	50	NONE									

THERE ARE SIX POSSIBLE RESPONSES TO THE FOLLOWING THREE ITEMS:

- | | | |
|-----|-----------------------|-------|
| (1) | Very Satisfied | (VS) |
| (2) | Satisfied | (S) |
| (3) | Fairly Well Satisfied | (FWS) |
| (4) | Somewhat Satisfied | (SS) |
| (5) | Dissatisfied | (D) |
| (6) | Very Dissatisfied | (VD) |

H.4

By circling the appropriate response indicate your satisfaction or dissatisfaction with the fact that the individuals indicated in H.3 above exercise such influence.

(1) VS (2) S (3) FWS (4) SS (5) D (6) VD

H.5

By circling the appropriate response indicate your satisfaction or dissatisfaction with the direction of the influence exercised by the individuals indicated in H.3 above.

(1) VS (2) S (3) FWS (4) SS (5) D (6) VD

H.6

By circling the appropriate response indicate your satisfaction or dissatisfaction with the amount of influence you are able to exercise on this topic.

(1) VS (2) S (3) FWS (4) SS (5) D (6) VD

THERE ARE SIX POSSIBLE RESPONSES TO THE FOLLOWING THREE ITEMS:

- | | | |
|-----|-----------------------|-------|
| (1) | Very Satisfied | (VS) |
| (2) | Satisfied | (S) |
| (3) | Fairly Well Satisfied | (FWS) |
| (4) | Somewhat Satisfied | (SS) |
| (5) | Dissatisfied | (D) |
| (6) | Very Dissatisfied | (VD) |

I.4

By circling the appropriate response indicate your satisfaction or dissatisfaction with the fact that the individuals indicated in I.3 above exercise such influence.

- (1) VS (2) S (3) FWS (4) SS (5) D (6) VD

I.5

By circling the appropriate response indicate your satisfaction or dissatisfaction with the direction of the influence exercised by the individuals indicated in I.3 above.

- (1) VS (2) S (3) FWS (4) SS (5) D (6) VD

I.6

By circling the appropriate response indicate your satisfaction or dissatisfaction with the amount of influence you are able to exercise on this topic.

- (1) VS (2) S (3) FWS (4) SS (5) D (6) VD

THERE ARE SIX POSSIBLE RESPONSES TO THE FOLLOWING THREE ITEMS:

- | | | |
|-----|-----------------------|-------|
| (1) | Very Satisfied | (VS) |
| (2) | Satisfied | (S) |
| (3) | Fairly Well Satisfied | (FWS) |
| (4) | Somewhat Satisfied | (SS) |
| (5) | Dissatisfied | (D) |
| (6) | Very Dissatisfied | (VD) |

J.4

By circling the appropriate response indicate your satisfaction or dissatisfaction with the fact that the individuals indicated in J.3 above exercise such influence.

(1) VS (2) S (3) FWS (4) SS (5) D (6) VD

J.5

By circling the appropriate response indicate your satisfaction or dissatisfaction with the direction of the influence exercised by the individuals indicated in J.3 above.

(1) VS (2) S (3) FWS (4) SS (5) D (6) VD

J.6

By circling the appropriate response indicate your satisfaction or dissatisfaction with the amount of influence you are able to exercise on this topic.

(1) VS (2) S (3) FWS (4) SS (5) D (6) VD

THERE ARE SIX POSSIBLE RESPONSES TO THE FOLLOWING THREE ITEMS:

- | | | |
|-----|-----------------------|-------|
| (1) | Very Satisfied | (VS) |
| (2) | Satisfied | (S) |
| (3) | Fairly Well Satisfied | (FWS) |
| (4) | Somewhat Satisfied | (SS) |
| (5) | Dissatisfied | (D) |
| (6) | Very Dissatisfied | (VD) |

K.4

By circling the appropriate response indicate your satisfaction or dissatisfaction with the fact that the individuals indicated in K.3 above exercise such influence.

- (1) VS (2) S (3) FWS (4) SS (5) D (6) VD

K.5

By circling the appropriate response indicate your satisfaction or dissatisfaction with the direction of the influence exercised by the individuals indicated in K.3 above.

- (1) VS (2) S (3) FWS (4) SS (5) D (6) VD

K.6

By circling the appropriate response indicate your satisfaction or dissatisfaction with the amount of influence you are able to exercise on this topic.

- (1) VS (2) S (3) FWS (4) SS (5) D (6) VD

THERE ARE SIX POSSIBLE RESPONSES TO THE FOLLOWING THREE ITEMS:

- | | |
|---------------------------|-------|
| (1) Very Satisfied | (VS) |
| (2) Satisfied | (S) |
| (3) Fairly Well Satisfied | (FWS) |
| (4) Somewhat Satisfied | (SS) |
| (5) Dissatisfied | (D) |
| (6) Very Dissatisfied | (VD) |

L.4

By circling the appropriate response indicate your satisfaction or dissatisfaction with the fact that the individuals indicated in L.3 above exercise such influence.

- (1) VS (2) S (3) FWS (4) SS (5) D (6) VD

L.5

By circling the appropriate response indicate your satisfaction or dissatisfaction with the direction of the influence exercised by the individuals indicated in L.3 above.

- (1) VS (2) S (3) FWS (4) SS (5) D (6) VD

L.6

By circling the appropriate response indicate your satisfaction or dissatisfaction with the amount of influence you are able to exercise on this topic.

- (1) VS (2) S (3) FWS (4) SS (5) D (6) VD

A slightly revised form of questionnaire was administered to those members of the organization who occupied designated positions of organizational authority, such as administrators and supervisors.

In the revised form, the questions in Sections D., E., and F. were revised slightly to ensure a more accurate response. These questions read as follows:

D.1 With which individuals do you normally discuss matters pertaining to the subject matter content to be taught in the various courses?

D.2 Indicate the individuals from whom you would seek advice concerning the selection of the subject matter content to be taught in the various courses.

D.3 Indicate the individuals who appear to be influential in matters pertaining to the selection of the subject content to be taught in the various courses. Do not forget to consider yourself.

E.1 With which individuals do you normally discuss matters pertaining to the methodology of instruction to be used in the various courses?

E.2 Indicate the individuals from whom you would seek advice concerning the methodology of instruction to be used in the various courses.

E.3 Indicate the individuals who appear to be influential in matters pertaining to the methodology of instruction to be used in the various courses. Do not forget to consider yourself.

F.1 With which individuals do you normally discuss matters pertaining to the organization of pupils for instruction within classrooms?

F.2 Indicate the individuals from whom you would seek advice concerning the organization of pupils for instruction within classrooms.

F.3 Indicate the individuals who appear to be influential in matters pertaining to the organization of pupils for instruction within classrooms. Do not forget to consider yourself.

APPENDIX B

INTERVIEW SCHEDULE

I. Conflict Relationships

A. There have been one or more conflict nominations.

Note whether these are reciprocated or not. In either case refer to data of nominee.

1. What was the conflict about? What happened?
2. Did this involve other people? If so who?
3. How was the disagreement settled?
4. Would you say this was a serious disagreement?
5. Would you say there was animosity between you during the conflict?
6. How do you feel now? Do you feel any animosity towards this person?
7. How does the other person feel now? Is there any animosity toward you?

Note whether the conflict nominee has been nominated on any other dimension.

If not

8. I notice you don't seem to have any contact with this person. Is this a result of the conflict situation?

If communications nominee

9. I notice you do discuss your work with this person regularly. Do you now get along well together?

If reliance nominee

10. I notice you would rely on this person. Why?
11. Do you expect any further disagreements to arise?

If attributed influence nominee

12. I notice you feel this person is influential.
Do you think this is a good thing?

13. Do you generally agree with this person's views?

B. There have been no conflict nominations.

1. You have had no disagreements of any proportion
with anyone?

II. Social Nominations

A. In relation to Part II, A. 1 of Questionnaire.

1. I notice you have indicated that you generally share
moments of free time with (nominees' names).
 - a) Why?
 - b) Are they interesting?
 - c) Fun to be with?
 - d) Share the same interests?
 - e) Would you call these people your friends?
2. What do you generally discuss?
 - a) Topics related to your work here in the school?
 - b) Other topics?

Relate responses to communications nominations. If congruent ask why.

B. In relation to Part II, A.2 of Questionnaire.

1. I notice you have indicated that you associate
with (nominees' names) outside of school.
 - a) What is the nature of your association?
 - b) Do you visit one another's homes?
 - c) Would you call these people your friends?
2. a) Do you discuss with them topics related to your
work here at school?
b) Other topics?

Relate responses to communications nominations. If congruent ask why.

C. In relation to reliance dimension of each topic. Where there are members who are both social and reliance nominees:

1. I notice you would rely on (nominee's name) in relation to (name of topic).

- a) Why would you rely on this person?

Where there are social nominees not nominated as reliance figures.

2. I notice that you associate with (nominee's name), but you have not indicated that you would rely upon him in relation to (names of topics).

- a) Why would you not rely on this person?

D. In relation to attributed influence dimensions of each topic.

Where a member is both a reliance and an attributed influence nominee.

1. I notice you consider (nominee's name) to be an influential person on (name of topic).

- a) Why is he so influential? What is the basis of his influence?

- b) How does he manage to be so influential?

Where a member is a reliance nominee, but not an attributed influence nominee.

2. I notice you would rely on (nominee's name) on (name of topic), but you don't feel he is an influential person.

- a) Why would you rely on him?

- b) Why is he not an influential person?

Where a member is an attributed influence nominee, but not a reliance nominee.

3. I notice that you feel (nominee's name) is an influential person on (name of topic) but that you would not rely upon him.

- a) Why not?

- b) Why is he so influential? What is the basis of his influence?

- c) How does he manage to be so influential?

III. General Influence Nominations.

A. In relation to reliance dimension of each topic.

1. I notice you would rely on (nominee's name) in relation to (name of topic).

- a) Why would you rely on this person?

B. In relation to attributed influence dimensions of each topic.

Where a member is both a reliance and attributed influence nominee.

1. I notice you consider (nominee's name) to be an influential person on (name of topic).

- a) Why is he so influential? What is the basis of his influence?

- b) How does he manage to be so influential?

Where a member is a reliance nominee, but not an attributed influence nominee.

2. I notice you would rely on (nominee's name) on (name of topic), but you don't feel he is an influential person.

- a) Why would you rely on him?

- b) Why is he not an influential person?

Where a member is an attributed influence nominee, but not a reliance nominee.

3. I notice that you feel (nominee's name) is an influential person on (name of topic) but that you would not rely upon him.

- a) Why not?

- b) Why is he so influential? What is the basis of his influence?

- c) How does he manage to be so influential?

Where administrative or coordinating personnel have not been nominated as reliance or attributed influence nominees.

4. I notice you have not indicated that you would rely on, or do not attribute influence to (nominee's name).

- a) Why not? For each topic where not nominated.

C. In relation to satisfaction scales.

Respondents may confound responses to Topic 4 and Topic 5. This must be

tested and, if necessary, these must be separated.

1. In relation to (topic) (4) and (topic) (5) I notice you have indicated (response) with the fact that (nominees' names) are influential on (name of topic).

- a) Does this pertain to all persons nominated, or to just some of them?

On the basis of the response to a),

- b) Why do you indicate (response) with (each nominee's name in turn)?

Relate this to responses on (topic) (5).

2. In relation to (topic) (6) and (topic) (5)

Where the responses to (topic) (5) and (topic) (6) are incongruent,

- a) Why?

In relation to each topic:

- b) Are you influential?
- c) Do you wish to be influential?
- d) How influential are you?

- | | |
|-----------------------------|-----|
| (1) Completely influential | ___ |
| (2) Very highly influential | ___ |
| (3) Quite influential | ___ |
| (4) Somewhat influential | ___ |
| (5) Very little influential | ___ |
| (6) Not influential at all | ___ |

In relation to each topic:

- e) Would you like to have more influence or less influence?
- f) Why?
- g) What is there preventing you from becoming influential?
- h) Do you feel rather powerful or powerless in this area?
- i) How influential would you like to be?

- | | |
|-----------------------------|-----|
| (1) Completely influential | ___ |
| (2) Very highly influential | ___ |
| (3) Quite influential | ___ |
| (4) Somewhat influential | ___ |
| (5) Very little influential | ___ |
| (6) Not influential at all | ___ |

3. To what extent do you feel your professional competence is used in planning policy or formulating practices in each of these task areas?

- a) To what extent do you make decisions?
- b) To what extent are you consulted?
- c) To what extent do you have the opportunity to make your views known?

- (1) To the limit of my competency _____
- (2) To a great extent _____
- (3) Quite extensively _____
- (4) To some extent _____
- (5) Very little _____
- (6) Not at all _____

IV. Supervision and Evaluation Practices

1. How is your work here evaluated? Is your work inspected or supervised?

- a) By whom?
- b) In what manner?
- c) How often?
- d) Do you feel this is primarily a means of evaluation or primarily a means of helping you develop professionally?
- e) On what basis is this evaluation made?

2. Is your work evaluated in any other way? If so,

- a) By whom?
- b) In what manner?
- c) How often?
- d) On what is this evaluation based?

3. Are any reports written giving an assessment or evaluation of your work?

- a) By whom?
- b) On what are the reports based?
- c) To whom are the reports made?
- d) To whom are the reports available?
- e) In relation to your present or future status in this organization, what effects may result from the contents of a report on your performance?
- f) Do you have any objections to having reports written on your performance?

4. Do you feel you are adequately supervised?
5. Do you feel you have sufficient freedom of action under the present system of supervision?
6. Would you suggest that your work here is
 - (1) Very closely supervised _____
 - (2) Closely supervised _____
 - (3) Fairly closely supervised _____
 - (4) Somewhat loosely supervised _____
 - (5) Loosely supervised _____
 - (6) Very loosely supervised _____

V. Modal Sanctions in Superordinate-Subordinate Relations

A. Superordinate to subordinate sanctions—interviewee is teacher.

1. a) Has (name of superordinate) ever expressed disapproval of your work?
 b) How often has this happened?
 c) How was the disapproval expressed?
 - (1) Ever suggested anything that might result in a loss financially?
 - (2) Ever suggested that you might teach other courses than you do? Or might transfer to another school?
 - (3) Other expressions of disapproval.
- d) What is his usual way of expressing disapproval?
2. a) Has (name of superordinate) ever expressed approval of your work?
 b) How often has this happenen?
 c) How was the approval expressed?
 - (1) Ever suggested anything that might result in a gain financially?
 - (2) Ever suggested that you might teach other courses than you do?
 - (3) Other expressions of approval.
- d) What is his normal way of expressing approval?
3. a) Has (name of superordinate) ever suggested ways in which you could improve your work?
 b) Did you view this as an expression of disapproval with your work?

- c) Did you feel that you must comply to avoid some further action?
- d) If so what further action?

4. a) With each superordinate's name in turn: Would you say that he generally expresses approval more often than disapproval?

- 5. a) Suppose you refused to cooperate with (name of superordinate), what would happen?
- b) Suppose you insisted on your refusal, what would happen?
- c) Suppose you continued to insist on your refusal, what would happen?

B. Subordinate to Superordinate Sanctions. Interviewee is a subordinate.

- 1. a) Have you ever expressed disapproval of (superordinate's name) actions to him?
- b) How often has this happened,
- c) How was the disapproval expressed?
- d) What was the reaction?

- (1) Immediate.
- (2) Over a period of time.

- 2. a) Have you ever expressed approval of (superordinate's name) actions to him?
- b) How often has this happened?
- c) How was the approval expressed?
- d) What was the reaction?

3. How would you classify (each superordinate) as being sensitive or insensitive to your expressions of approval or disapproval?

- (1) Very sensitive _____
- (2) Sensitive _____
- (3) Fairly sensitive _____
- (4) Somewhat sensitive _____
- (5) Insensitive _____
- (6) Very insensitive _____

C. Is it safe to assume that different amounts of status accrue to different positions or to different teaching assignments?

- 1. If so, would you please explain?

2. How would you order these positions or teaching assignments from those to which the most status accrues to those to which the least status accrues?

D. Superordinate to Subordinate Sanctions. The interviewee is a superordinate.

1. a) Have any of the people in your charge expressed to you disapproval of your actions?
 b) How often has this happened?
 c) How was the disapproval expressed?
 c) How did you react?
2. a) Have any of the persons in your charge expressed to you approval of your actions?
 b) How often has this happened?
 c) How was the approval expressed?
 d) How did you react?
3. a) How would you classify yourself as being sensitive or insensitive to expressions of approval or disapproval from your subordinates?
 (1) Very sensitive _____
 (2) Sensitive _____
 (3) Fairly sensitive _____
 (4) Somewhat insensitive _____
 (5) Insensitive _____
 (6) Very insensitive _____

VI. Dependency

A. The interviewee is a subordinate.

1. a) If you had a serious disagreement with (superordinate's name), how could this affect your present and future status in education?
 b) If (superordinate's name) took a dislike to you, or began to feel you were not an asset to this organization, how could he affect your present or future status here?
 c) How does this affect your behaviour?
 (1) Do you generally comply with (superordinate's name) because of possible consequences?
 (2) Do you generally muffle disagreement with (superordinate's name) because of possible consequences.

2.
 - a) Are you ambitious to improve your position in this system?
 - b) If so, what position would you like to have?
 - c) Why?
3. Suppose that (superordinate's name) wanted to influence your behaviour.
 - a) What could he do that you would consider to be coercive?
 - b) Does knowledge of this affect your behaviour in any way?
 - c) Changes to an improved or lowered position in this system may result in a change of salary.
To what extent is this a factor in your thinking?
 - d) What remunerative advantages or disadvantages could be suggested by (superordinate's name) which would cause you to modify your behaviour?
 - e) Does knowledge of this affect your behaviour in any way?
 - f) To what extent is your status dependent upon your relationship with (superordinate's name)?
 - (1) Completely dependent ___
 - (2) Highly dependent ___
 - (3) Quite dependent ___
 - (4) Somewhat dependent ___
 - (5) Very little dependent ___
 - (6) Not at all dependent ___

APPENDIX C

COMMUNICATION, RELIANCE AND ATTRIBUTED INFLUENCE RANKS BY
DEPARTMENT ON TASK TOPICS 1 TO 8

M e m b e r No.	English Department											
	Task 1 DIMENSION			Task 2 DIMENSION			Task 3 DIMENSION			Task 4 DIMENSION		
	1	2	3	1	2	3	1	2	3	1	2	3
11	7.5	8	8.5	3	20	11.5	8	3	4.5	5	4	3.5
23	31	41	33	44.5	41	40.5	32	19.5	18.5	14	21.5	24
27	31	41	33	30.5	41	28	32	33.5	34	9	12.5	24
29	31	34	17	35	34	18	32	33.5	18.5	30.5	21.5	15
31	31	41	33	24.5	41	40.5	32	33.4	34	7	42.5	33
36	31	41	33	7	41	28	12.5	33.5	34	8	16	24
39	31	28	33	36.5	28	18	32	12	34	2	10	7
42	31	41	33	24.5	41	28	32	33.5	34	6	12.5	15
45	31	34	33	30.5	34	28	32	12	18.5	15.5	5.5	15
46	31	41	33	38	41	28	32	33.5	34	30.5	32	24
	Task 5 DIMENSION			Task 6 DIMENSION			Task 7 DIMENSION			Task 8 DIMENSION		
	1	2	3	1	2	3	1	2	3	1	2	3
11	3	7	5.5	3	6	6.5	1	10	4	2	4	2
23	19.5	23	27	25	23.5	18.5	23	37	22.5	20	32	23.5
27	9	18	27	9.5	20	18.5	11	43	34.5	22	22.5	23.5
29	34	35.5	27	29.5	26.5	30.5	29.5	33.5	22.5	31.5	41.5	32
31	11	41.5	36.5	13	37.5	30.5	15	43	34.5	27.5	41.5	38
36	19	24	14	2	20	18.5	8	22	22.5	8	29.5	23.5
39	10	9	9.5	19	11	10.5	11	14	9	14	17	16.5
42	19.5	11.5	14	16.5	16	10.5	5	20	12.5	27.5	17	16.5
45	8	10	9.5	18	5	6.5	11	16	12.5	16	19	11.5
46	34	41.5	36.5	29.5	37.5	41.5	31	31	22.5	31.5	35.5	32

NOTE: In all Sections of Appendix C,
Dimension 1 is Communications,
Dimension 2 is Reliance,
Dimension 3 is Attributed Influence.

M e m b e r N O.	Social Studies Department											
	Task 1 DIMENSION			Task 2 DIMENSION			Task 3 DIMENSION			Task 4 DIMENSION		
	1	2	3	1	2	3	1	2	3	1	2	3
12	7.5	14	10.5	21	21	15	8	6	9	12	7.5	9.5
33	31	35	17	36.5	30.5	28	16.5	19.5	14	3	3	7
36	31	35	33	7	41	28	12.5	33.5	34	8	16	24
37	12.5	16	33	32.5	23.5	28	32	33.5	34	15.5	23.5	24
38	31	35	17	41.5	41	28	32	33.5	18.5	4	10	24
44	31	35	33	41.5	30.5	18	16.5	33.5	14	10	10	15
	Task 5 DIMENSION			Task 6 DIMENSION			Task 7 DIMENSION			Task 8 DIMENSION		
	1	2	3	1	2	3	1	2	3	1	2	3
12	4.5	25	9.5	7.5	20	18.5	6.5	8.5	8	11	10	3.5
33	2	3.5	5.5	4.5	17	10.5	6.5	11.5	22.5	17	27	23.5
36	19	24	14	2	20	18.5	8	22	22.5	8	29.5	23.5
37	36	20.5	19.5	15	14	18.5	25	22	22.5	24	29.5	23.5
38	7	26	27	7.5	20	18.5	13.5	43	34.5	34	29.5	32
44	4.5	5.5	14	14	20	18.5	13.5	22	22.5	27.5	29.5	32

Mathematics Department												
	Task 1 DIMENSION			Task 2 DIMENSION			Task 3 DIMENSION			Task 4 DIMENSION		
	1	2	3	1	2	3	1	2	3	1	2	3
13	5	6	8.5	4.5	18.5	11.5	4	6	9	17	5.5	3.5
26	31	11	33	17	26	28	14	12	34	26	19.5	24
32	31	12.5	33	17	26	40.5	32	12	34	26	19.5	24
40	10	12.5	33	17	26	40.5	32	12	34	26	26	15
	Task 5 DIMENSION			Task 6 DIMENSION			Task 7 DIMENSION			Task 8 DIMENSION		
	1	2	3	1	2	3	1	2	3	1	2	3
13	21	3.5	2.5	24	11	18.5	3.5	3.5	6.5	3	2.5	6.5
26	23.5	19	27	33.5	37.5	30.5	15	18.5	34.5	30	15	16.5
32	29	8	19.5	33.5	37.5	30.5	18.5	14	22.5	24	11.5	16.5
40	23.5	14	19.5	28	37.5	30.5	18.5	14	22.5	24	17	23.5

M e m b e r N O.	Science Department											
	Task 1 DIMENSION			Task 2 DIMENSION			Task 3 DIMENSION			Task 4 DIMENSION		
	1	2	3	1	2	3	1	2	3	1	2	3
14	7.5	6	10.5	6	9	6	8	9	9	24	1.5	3.5
25	31	35	33	23	14	40.5	32	33.5	34	32	27.5	15
30	31	35	33	27	14	40.5	32	33.5	34	22.5	27.5	15
35	31	35	33	27	14	28	32	33.5	34	22.5	30	33
43	31	35	33	8	41	40.5	32	33.5	34	10	18	33
7	31	20.5	33	27	3	13.5	32	33.5	34	44.5	37	43
	Task 5 DIMENSION			Task 6 DIMENSION			Task 7 DIMENSION			Task 8 DIMENSION		
	1	2	3	1	2	3	1	2	3	1	2	3
14	14	1	5.5	9.5	13	18.5	3.5	2	4	4	2.5	3.5
25	14	14	19.5	16.5	15	18.5	15	31	22.5	10	22.5	23.5
30	14	27	27	6	37.5	41.5	18.5	31	12.5	18.5	22.5	16.5
35	14	41.5	36.5	11.5	37.5	30.5	41.5	35.5	22.5	42	22.5	23.5
43	14	41.5	42.5	11.5	37.5	41.5	18.5	35.5	34.5	18.5	22.5	32
7	42.5	30	36.5	41.5	37.5	41.5	41.5	29	44	42	33.5	44.5

French Department

	Task 1 DIMENSION			Task 2 DIMENSION			Task 3 DIMENSION			Task 4 DIMENSION		
	1	2	3	1	2	3	1	2	3	1	2	3
15	7.5	9	12.5	9	16	7	8	6	9	33	14	3.5
22	31	35	33	29	22	40.5	32	33.5	34	34.5	42.5	33
29	31	35	17	35	34	28	32	33.5	18.5	30.5	21.5	15
46	31	35	33	38	41	28	32	33.5	34	30.5	32	24
8	31	20.5	33	32.5	11	13.5	32	33.5	34	34.5	29	33
	Task 5 DIMENSION			Task 6 DIMENSION			Task 7 DIMENSION			Task 8 DIMENSION		
	1	2	3	1	2	3	1	2	3	1	2	3
15	34	11.5	5.5	22.5	11	18.5	22	3.5	4	5	7	6.5
22	42.5	35.5	27	41.5	26.5	30.5	29.5	33.5	22.5	42	41.5	38
29	34	35.5	27	29.5	26.5	30.5	29.5	33.5	22.5	31.5	41.5	32
46	34	41.5	36.5	29.5	37.5	41.5	31	31	22.5	31.5	35.5	32
8	31	28	14	41.5	26.5	30.5	41.5	24	44	42	33.5	38

M e m b e r N O.	Commerce Department											
	Task 1 DIMENSION			Task 2 DIMENSION			Task 3 DIMENSION			Task 4 DIMENSION		
	1	2	3	1	2	3	1	2	3	1	2	3
16	31	6	6	21	10	11.5	8	6	4.5	18	15	7
21	31	35	33	44.5	17	40.5	32	33.5	34	28	42.5	33
23	31	35	33	44.5	41	40.5	32	19.5	18.5	14	21.5	24
	Task 5 DIMENSION			Task 6 DIMENSION			Task 7 DIMENSION			Task 8 DIMENSION		
	1	2	3	1	2	3	1	2	3	1	2	3
16	27.5	5.5	2.5	31.5	8.5	6.5	27.5	5.5	6.5	12	7	6.5
21	27.5	22	27	31.5	37.5	30.5	27.5	43	34.5	27.5	41.5	32
23	19.5	23	27	25	23.5	18.5	23	37	22.5	20	32	23.5

Physical Education Department												
	Task 1 DIMENSION			Task 2 DIMENSION			Task 3 DIMENSION			Task 4 DIMENSION		
	1	2	3	1	2	3	1	2	3	1	2	3
17	11	15	12.5	4.5	18.5	8	32	6	6	13	31	24
36	31	35	33	7	41	28	12.5	33.5	34	8	16	24
37	12.5	16	33	32.5	23.5	28	32	33.5	34	15.5	23.5	24
41	12.5	10	33	19	23.5	28	12.5	33.5	34	21	23.5	15
	Task 5 DIMENSION			Task 6 DIMENSION			Task 7 DIMENSION			Task 8 DIMENSION		
	1	2	3	1	2	3	1	2	3	1	2	3
17	25	17	14	20	7	10.5	9	11.5	12.5	7	26	11.5
36	17	24	14	2	20	18.5	8	22	22.5	8	29.5	23.5
37	36	20.5	19.5	15	14	18.5	25	22	22.5	24	29.5	23.5
41	26	20.5	19.5	22.5	23.5	18.5	24	17	12.5	33	14	16.5

M e m b e r N O.	Industrial Arts Teachers											
	Task 1 DIMENSION			Task 2 DIMENSION			Task 3 DIMENSION			Task 4 DIMENSION		
	1	2	3	1	2	3	1	2	3	1	2	3
34	31	35	14	11.5	30.5	28	32	32.5	34	40.5	42.5	33
28	31	35	17	11.5	30.5	28	32	33.5	34	40.5	37.5	33
6	31	20.5	17	43	5.5	11.5	32	17	18.5	37.5	37.5	40.5
	Task 5 DIMENSION			Task 6 DIMENSION			Task 7 DIMENSION			Task 8 DIMENSION		
	1	2	3	1	2	3	1	2	3	1	2	3
34	37.5	33.5	36.5	35.5	37.5	30.5	35.5	43	34.5	36.5	41.5	32
28	37.5	33.5	36.5	35.5	26.5	30.5	35.5	30.5	34.5	36.5	35.5	32
6	31	30	36.5	41.5	37.5	41.5	41.5	22	44	42	41.5	44.5

NOTE: In all Sections of Appendix C

Dimension 1 is Communications

Dimension 2 is Reliance

Dimension 3 is Attributed Influence

APPENDIX D

INFLUENCE IN THE PAIR RELATIONSHIP FOR ALL MEMBERS OF THE SYSTEM
CATEGORIZED ACCORDING TO FIGURE VI

MEMBERS	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	
1		6	12	2	13	13	12	13	12	13							12																14													14	
2			12	9	13	12	12	12	12	13																																					
3					7	12	12	12	12	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	12	13	12	12	13	12	13	13	14	12	12	13	13	13	12	13	12	13	13	13	13	13	
4			13		11	12	12	13	13	11	11	16	12	11	11	11	6	6	11	12	12	12	12	6	11	11	12	12	11	6	11	11	12	11	11	12	12	9	6	11	6	11	11	14	11	11	
5						12	2	13	13	12	10	12	12	2	12	12	12	12	10	12	12	12	12	12	12	11	12	12	12	12	10	11	12	12	11	10	12	12	10	11	12	12	12	12	12	11	
6																												12						12													
7														7											7										7												
8							7																7							2																11	
9																		13																													
10																			2	2																		3									
11											9	7	9	9	7	7	2	2	2	8	8	4	8	8	8	8	6	8	13	8	13	8	1	8	8	13	8	8	1	8	8	2	8	8	12	13	
12												7	3	7	3	7	2	9	9	4	8	8	8							3	3	8	15	8	8	11	13	12	9	8	8	3	8	12		8	
13													2	7	3	7	8	7	2	3	8	8	8	8	6	8	8	8	8	2	8	8	8	8	8	8	8	3	11	8	3	8	8	8	8	8	
14														7	1		2	7		3	8	8	8	2	3	8	4	8	11	3	8	8	8	11	8		8	8	8	8	3	11	8	3	8		
15																	4	7	8		8	12	8	8	8	8	8	8	12	8	4	8	1	8	8	4	8	8	1	8	8	8	3	3	12		
16																		7	8	7	2	2	8	12	8	4	4	8	4	8	4	8	4	8	8	8	8	8	4	8	8	8	8	8	8	8	8
17														4				8	7	2	8	8	8	8	8	8	8	8	8	4	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8
18																			8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8
19																				2	12	12	11	2	7	11	12	8	11	11	7	2	4	12	11	11	7	11	12	11	2	2	12	12	12	12	12
20															4	11					12	12	11	8	4	11	12	11	11	11	11	12	14	12	12	2	12	11	12	11	8	11	12	12	12	12	
21																					8	7	8	8	3	8	8	8	8	8	3	8	14	8	8	8	8		14	8	8	8	4		8		
22																						3	3	8	8	8	8	7	8	8	8	8	8	8	8	8	8	3	8	8	8	8	8	8	11		
23																								4	8	8	11	8	8	4	3		3	8	8	8	8	8	8	1	8	8		8	8	1	
24																									8	8	8	8	8	8	3	8	8		8	8	8		8	8	8	11	8	8	3		
25																										4	8	8	8	2	8	8		8	11	4	8	8	8	8	8	8	7	8	8	8	
26																									8	8	8	4	4	7		8	8	8	8	8	8	8	8	8	8	8	8	8	8		
27																													4		8	7	8		8	8	7	8	8		8	8	8	8	7		
28																														8	8	4	8	8	7	8	8	8	8	8	8	8	8	8	8	8	
29																													11		8	7	8	8	8	7	8	8	7	8	8	7	8	8	7	2	
30																																															
31																																															
32																																															
33																																															
34																																															
35																																															
36																																															
37																																															
38																																															
39																																															
40																																															
41																																															
42																																															
43																																															
44																																															
45																																															
46																																															

NOTE: Symmetrical relationships appear above the diagonal only.
In asymmetrical relationships, the dominant member is designated by the identification of the row in which the relationship appears.

B29859